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ESG considerations for official institutions

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Introduction

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Official Institutions

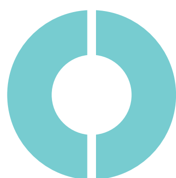
Sovereign investors have always focused on the long-term nature of their investments but responsible investment is now gaining traction across official institutions. The United Nations Principles for Responsible Investment (PRI) define responsible investment as 'an approach to investing that aims to incorporate environmental, social and governance (ESG) factors into investment decisions, to better manage risk and generate sustainable, long-term returns.' Norway's GPFG states that 'sustainable development is a precondition for return on the Petroleum Fund's financial investments in the long term'[1] while CPPIB argue that incorporating ESG factors into investment decisions is part of the fund's mandate to enhance returns without undue risk.

While sustainability and good governance are familiar concepts to sovereign investors, there are far wider reasons why ESG is particularly significant for official institutions. Whether focusing on reputational risk, potential conflicts of interest or the position of sovereign investors as universal owners, ESG is coming to the forefront of official institutions' investment considerations.

Key takeaways:

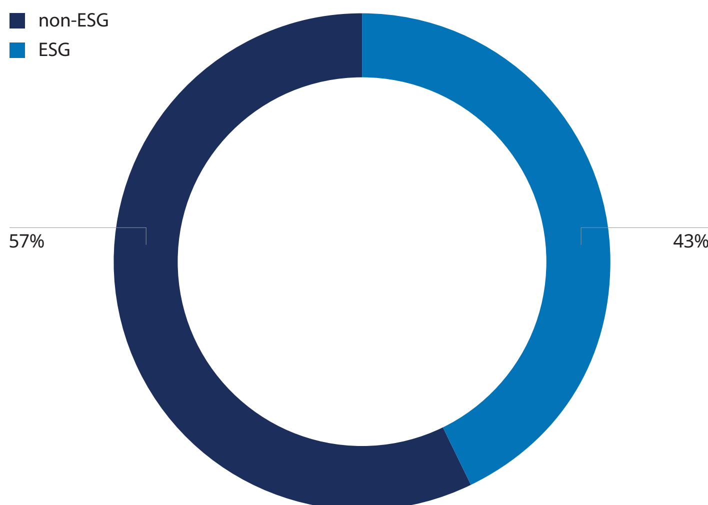
1. **Risk first: ESG approaches have been shown to reduce financial risk and can mitigate other non-financial risks relevant to official institutions, such as reputational risk.**
2. **Integration and engagement are key: Passive ESG approaches have significant limitations, particularly for large 'universal' asset owners. Ensuring an institution adopts an effective and robust ESG approach is paramount.**
3. **Asset owners are moving rapidly: 43% of official institutions' assets are covered by some form of publicly disclosed ESG policy and this is only going to grow as scrutiny on asset owners increases.**

1 Norwegian Government Pension Fund Global, 2016.



1. ESG approaches

Figure 1: ESG (light blue) and non-ESG (dark blue) official institution assets



Source: Schroders, SWFI, SWF annual reports and public websites. 'Non-ESG' refers to institutions that do not publicly disclose ESG practices. Analysis conducted by Schroders based on top 30 official institutions by asset size. Please see appendix for further details.

Of the 30 largest official institutions, 43%[2] of assets are covered by an ESG policy. While the majority of these were based in Europe or North America, notable ESG advocates elsewhere included Japan's GPIF and South Korea's NPS. Regions lacking ESG disclosure were the Middle East and some parts of Asia. However, ESG adoption in the official institutions universe compares favourably to the wider universe of investors; a survey found that 37% of investors used structured ESG evaluation in their investment process[3].

While the majority of institutions in this analysis are sovereign wealth funds, ESG is also relevant for central banks that have an allocation to equities, such as the Hong Kong Monetary Authority (HKMA) or the Swiss National Bank (SNB). The nature of central bank reserve portfolios means that capital preservation and liquidity are key requirements for reserve management. Studies have shown that considering ESG in the context of capital preservation can reduce tail risk and volatility, without sacrificing returns (see Hoepner (2013) and section C of this paper).

Figure 2: Objectives and constraints for central banks reserve management

Form	Type	Criteria	Description
Objective Maximise	Preference on Reserves STD	Stability of ratio and returns	Shae density of outcomes so that ratio most likely falls into the range [1,1.05] while maximising reserves
Risk Constraint 1	Inequality on returns	Safety of principal	Limit the unrealised losses so that the portfolio return is always ≥ 0
Risk Constraint 2	CVaR constraint on returns	Safety on extreme losses	In 1% of the worst cases, the average shortfall in returns below 3% should not exceed 2%
Risk Constraint 2	CVaR constraint on Liquidity	Liquidity	In 2% of the worst cases, the average shortfall in liquidity portfolio should not exceed 10%

Source: Bernadell et al. (2004) Risk management for central bank foreign reserves.

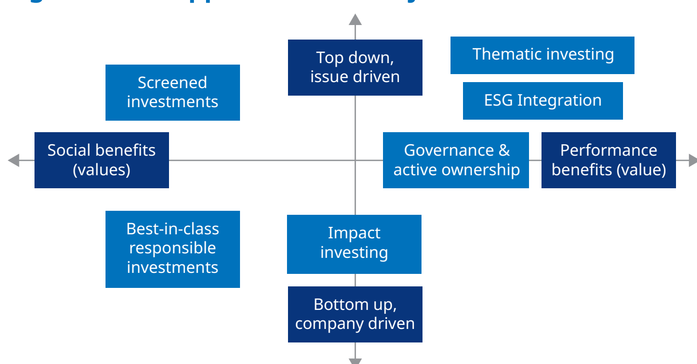
While the terms ESG and responsible investment are used interchangeably, they encompass a wide variety of approaches and objectives. We divide the universe into two key approaches: top down and bottom up. Top down ESG approaches focus on broad themes and systematic issues. In contrast, bottom up approaches focus on individual companies and often seek to engage with these companies on ESG issues to drive change. We can further divide this universe by looking at investor objectives, are they considering ESG issues from an ethical standpoint, and are not worried about the investment impact or to enhance investment performance by ensuring that a wider range of risks are considered. CFA Institute identifies six methods of implementing ESG considerations into investment decision making[4].

2 Source: Schroders, 2017. See appendix for further details.
3 EY (2015) Tomorrow's Investment Rules 2.0
4 CFA Institute (2015) Environmental, social and governance issues in investing

These are as follows:

1. Exclusionary screening
2. Best-in-class (i.e. selecting companies with better ESG credentials than their peers)
3. Active ownership
4. Thematic investing
5. Impact investing
6. ESG integration

Figure 3: ESG approaches and objectives



Source: Schroders.

Arguably the most commonly-known ESG approach is exclusionary screening of the investment universe. This approach is a relatively simple and resource-light way of implementing ESG. Under this method, investors will simply exclude any companies which do not meet certain ESG criteria. This approach has had significant traction across the sovereign investor universe. For example, Norway's GPFG has a strict policy of excluding companies that violate human rights or damage the environment. CalPERS also make a number of overarching exclusions across tobacco companies, assault weapon manufacturers and investments in countries such as Sudan. Similarly, the Swiss National Bank excludes a number of investments based on ethical grounds such as human rights violations, environmental damage and internationally banned weapons[5]. Issues such as these may pose a serious risk of reputational damage for the investor.

Thematic investing is another top down approach which entails filtering the investment universe based on a particular theme such as climate change. The result is a product that focuses on or excludes a subset of the investment universe. Asset owners such as the UK's Environment Agency commits to invest in low-carbon, energy efficient and other climate mitigation opportunities and AP3 in Sweden have made an allocation to sustainable investment.

ESG integration can be both top down and bottom up. Top down approaches focus on long-term systematic changes to the investment universe, which call for a different investment approach. Conversely, bottom up integration entails firm-specific analysis of how companies are performing in ESG terms. There are a number of examples of these approaches being used by official institutions; CalSTRS has committed $2.5bn to a global low-carbon index, Sweden's AP4 has constructed internal low carbon portfolios, while Japan's GPIF has solicited advisors to help build an ESG index fund. Perhaps one of the most significant top down ESG-related products in the official institutions space is the S&P Long-Term Value Creation Global Index, which identifies companies with strong sustainability credentials and high financial quality. While this index is not expressly focused on ESG, the themes of sustainability, financial quality and governance are relevant to many ESG principles. This index has already been openly supported by a number of government funds including Canada Pension Plan Investment Board (CPPIB), Singapore's GIC, New Zealand Superannuation Fund (NZSF) and Ontario Teachers' Pension Plan (OTPP). While less wide-spread, bottom up ESG integration is used by the likes of Norges.

ESG engagement has been adopted by some of the largest official institutions. CPPIB, NZSF and GPIF all engage with individual companies on ESG issues in an attempt to improve performance and practices. In December 2016, NZSF engaged with carbon-intensive companies in the steel, construction and chemicals sectors to encourage them to improve their climate change impact assessments and policies[6]. Similarly, the CPPIB is engaging with a number of cobalt mining companies to improve their methods of identifying human rights violations, such as child labour[7]. Engagement is a particularly effective approach for official institutions, as pressures from sizable and influential investors are more likely to instigate change in company practices. However, ESG engagement requires significant resources in order to be effective. This may even require a dedicated ESG team to manage company engagements and monitor company progress. This burden has encouraged some institutions to delegate ESG investment to an asset manager who has dedicated resources and may be able to bring similar-minded asset owners together to engage with companies on specific issues.

Voting on corporate issues is another important aspect of ESG engagement. Japan's GPIF states that proxy voting is a 'critical part of fulfilling one's fiduciary duty[8], while the Santiago Principles and the OECD maintain that sound and transparent voting practices are crucial to good corporate governance[9]. Many of the largest sovereign investors including Norway's GPFG, Japan's GPIF and CPPIB disclose their voting policies in detail, while local stewardship codes exist in the UK, Japan, Indonesia, Taiwan and South Africa. In 2015, Norway's GPFG voted on 112,601 resolutions across 429 companies relating to issues including election of directors, poor reporting or amendments of bylaws that are not in shareholder interest[10]. Japan's GPIF and CPPIB also discuss the importance of engaging with investment managers on their stewardship and voting policies. In September 2015, the GPIF interviewed all their external managers about their stewardship policies, including voting activities[11]. However, the issue of resource cost is relevant when considering actively voting on issues and can again be delegated to an asset manager.

5 Swiss National Bank, 2016
6 NZSF (2016) ESG viewpoint: Emission management in carbon intensive sectors
7 CPPIB (2016) Sustainable investing
8 GPIF (2016) Summary of the first meeting of "Global Asset Owners' Forum"
9 G20/OECD Principles of Corporate Governance
10 Norges Bank Investment Management (2015) Responsible investment
11 Summary report of GPIF's stewardship activities in 2015

2. Why have official institutions adopted ESG approaches?

While ESG is gaining momentum across asset owners, there remain a wide variety of reasons driving ESG adoption. In a recent survey of SWFs in the US, all five funds identified had a different reason for adopting ESG approaches, ranging from risk management to investment performance[12]. In the following sections we discuss some key reasons why ESG factors should be a consideration in investment decision making for official institutions.

Figure 4: ESG motivations for US SWFs

	Impetus	Comment
SWF1	Mission driven	– Seeking social justice – Limit negative physical & financial impact of climate change
SWF2	Performance driven	– Seeking better risk-adjusted returns through integration of material governance factors into Private Equity transactions
SWF3	Risk management	– Limit negative impact of climate change & poor company management on Private Equity and Real Estate investments
SWF4	Performance and mission driven	– Seeking better risk-adjusted returns through ESG integration – Promote economic stability and growth of middle class in South East Asia & other emerging markets
SWF5	Mission driven and risk management	– Seeking to be a responsible corporate citizen and to mitigate select risks

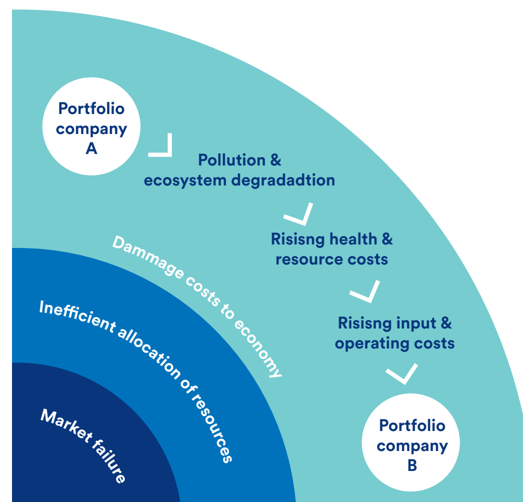
Source: North Carolina Department of the State Treasurer, as at September 2016.

A) Universal ownership – the importance of engagement

Given the scale, influence and investment activities of many official institutions, they are often referred to as 'universal owners.' A universal owner is defined as an investor with a highly-diversified, long-term portfolio that is representative of the global capital markets. These investors are inevitably exposed to externalities, either directly or indirectly, which include and will increasingly include environmental and social factors. This means that the poor ESG practices of one company can impact the returns of the entire portfolio over the long term. For example, the annual environmental costs related to human activity are estimated to be $6.6 trillion and are likely to affect the company earnings of over 50% of the MSCI All Country World Index[13]. For large investors with significant international holdings, environmental externalities are unavoidable, whether materialising through lower dividend payments from soaring costs or through decreasing natural resource inputs reducing expected future cashflows.

A noteworthy example of this is the effects of China's global warming gas emissions. Black carbon, which is produced by burning crop residue, coal and vehicle emissions, was estimated to have reduced wheat and rice crop yields by 30%[14]. This significant impact on the supply of wheat and rice increased input costs and negatively impacted all companies that used these products. Examples such as these demonstrate two key conclusions; firstly that environmental impacts can be contagious, impacting companies across an industry, including those that have not been guilty of poor environmental practices. Secondly, taking a purely top down approach to ESG exclusion is unlikely to protect a portfolio from the related losses.

Figure 5: Cross-company contagion of environmental externalities



Source: PRI Association and UNEP Finance Initiative.

A more effective approach to improving financial performance in the long-run is engaging with companies to change practices. NZSF discusses the importance of collaboration among universal owners to 'reduce value destroying practices across markets[15]. Furthermore, engagement has been shown to add value and improve investment performance. CalPERS identify companies that show poor corporate governance and add these companies to a 'focus list.' CalPERS then engage with management to instigate changes to strategy and governance, a process which added 15% alpha cumulatively over 14 years from 1999-2003[16], showing that engagement can significantly enhance returns as well as reduce risk. Similarly, a study by Dimson et al (2012) found that engaging with companies resulted in a 1.8% increase in returns in the following year and a 4.4% increase when engagements were deemed successful[17]. For official institutions who are universal owners, engagement can be a more effective means of incorporating ESG issues and improving investment performance, albeit a more resource intense one.

12 North Carolina Department of the State Treasurer (2016) Long term stewardship: A pragmatic approach for ESG integration for institutional investment

13 PRI Association and UNEP Finance Initiative (2011) Universal Ownership: Why environmental externalities matter to institutional investors

14 Kim (2007) A China environmental health project fact sheet: Transboundary air pollution – will China choke on its success?

15 New Zealand Superannuation Fund Responsible Investment Framework 2016

16 California Public Employees' Retirement System (CalPERS) 2015. Analysis from 1999 to 2013 showed companies engaged with returned 15.27% above Russell 1000 index, as at 30 June 2014.

17 Dimson, Karakas and Li (2012) Active ownership

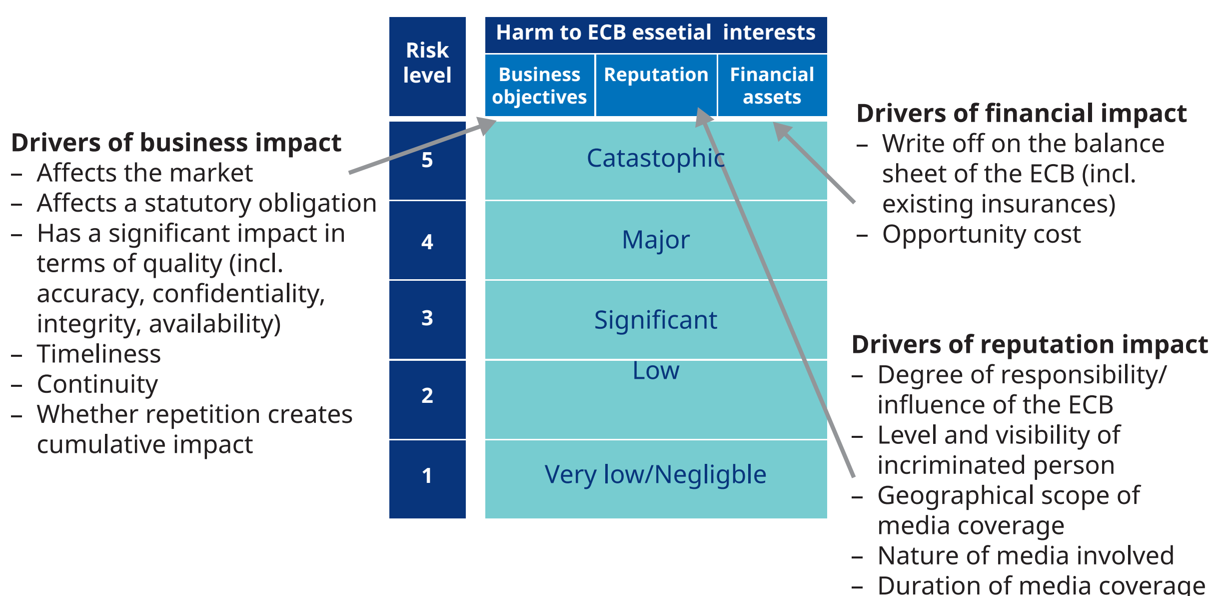
B) Reputational risk

Reputational risk is arguably one of the most important considerations for sovereign investors. Many of the objectives of official institutions rely heavily on credibility and integrity, whether leading though market best practice or acting as a safety net for the economy. For central banks in particular, credibility and reputation can directly influence policy effectiveness, such as the impact of inflation changes which rely on the public reactions and behaviours. The BIS argues that reputation is the most important asset for a central bank, as their position as a support system for the economy relies on reliability and integrity. Furthermore, most official institutions hold significant value to preserving their independence, something which would be undermined if reputational damage suggested greater government oversight was needed. Reputational protection is embedded in the legislation governing the NZSF which states that investment policy 'requires us to avoid prejudice to New Zealand's reputation as a responsible member of the world community[18].

Manus islands operated by a subsidiary of the company[19]. Another slightly different example is the Kuwait Investment Authority, whose senior executives faced questions over their investments in hotels which served alcohol[20]. Past examples suggest that public perception often takes greater prominence than facts. For example, HKMA risked reputational damage when complaints were made about banking services, despite the fact that these services were beyond the HKMA's supervisory remit[21]. Furthermore, ethical issues or issues related to integrity, such as corruption, environmental damage or misconduct, tend to attract more public attention than operational or policy concerns.[22]

While risk management is fundamental for most official institutions', reputational risk can be hard to mitigate. However, reputational risk is beginning to be incorporated into risk management frameworks, with the importance of nonfinancial risks seeing increasing focus since the financial crisis. The IMF categorises nonfinancial risks into three areas; operational, policy and reputational[23]. Similarly, the ECB's operational risk management framework formally identifies reputation as a specific risk consideration, as shown in Figure 6.

Figure 6: Drivers for the risk impact-grading scale of the European Central Bank (ECB)



Source: Bindseil, Gonzalez, Tabikis (2009) Risk management for central banks and other public investors.

Reputational risk has gained prominence in recent years following the financial crisis, with institutions often being held to account for issues arising from both direct and indirect actions. Norges Bank Investment Management was urged to disinvest from Spanish multi-national, Ferrovial, after a number of United Nations and humans rights experts highlighted the abuse of refugees at offshore Australian immigration camps on Nauru and

ESG analysis adds another layer to the mitigation of reputational risk arising from investments. Issues such as environmental damage or poor labour practices may not be identified by traditional investment analysis yet pose a significant risk for the institution. Integrating ESG analysis into the investment process creates a more robust framework for investment decisions, incorporating all the concerns official institutions have including reputational risk. There are a number of ESG tools that can be used to identify exposures to controversies, which can be used at a company or a portfolio level.

18 NZSF (2015) Why we believe responsible investing pays off
19 Business & Human Rights Resource Centre (2016)
20 Financial Times (2013) Kuwait Investment Authority: Integrity and caution are no handicap
21 BIS (2009) Issues in the governance of central banks
22 Bindseil, Gonzalez, Tabikis (2009) Risk management for central banks and other public investors
23 IMF Working Paper (2016) Central bank governance and the role of nonfinancial risk management

C) Financial performance and ESG

A significant volume of research has been produced exploring the link between ESG and financial performance. While these studies draw a range of conclusions, 88% of research shows that sound ESG practices have a positive relationship to the operational performance of firms[24]. More specifically, analysis conducted by Deutsche Bank which reviewed over 100 articles on sustainable investing found that 100% of academic studies show that companies with stronger corporate social responsibility and ESG have a lower cost of capital and 89% indicate outperformance based just on higher ESG ratings[25]. The overarching conclusion is that there is little to no evidence which suggests that considering ESG factors adversely affects performance. The CFA Institute reaches a similar conclusion stating that ESG integration should not have a performance impact as 'it is simply about doing a more complete investment analysis[26]. Similarly, European Fund and Asset Management Association (EFAMA) conclude that there is no evidence that responsible investment harms returns and that responsible investment 'is at a minimum an opportunity to improve the risk management within the chosen investment strategy[27].'

However, there are a number of instances where ESG exclusions have had an adverse impact on returns. Perhaps the most prominent of these is CalPERS' exclusion of tobacco stocks which cost the fund an estimated $3bn in returns over a 12 year period[28]. Following this research, CalPERS conducted a review of its investment exclusions and decided to maintain them as engagement would not have been a viable option in this sector. This example raises an important point, while most research shows that ESG does not necessarily negatively impact returns, ESG and responsible investment have to be ingrained in the beliefs of an organisation in order to defend issues such as this.

Furthermore, simply looking at returns is only half the picture. ESG factors are essentially categories of investment risk, in a similar way to credit risk of FX risk. A key difference between ESG risks and more commonly-assessed investment risks is that many ESG risk events are unprecedented, rare and difficult to measure. Importantly, framing ESG in this context helps explain why investments like tobacco have outperformed; the returns of tobacco can be seen as the premium for investing in higher risk stocks on an ESG basis. Similarly, a recent study by AQR found that the ESG exposure of stocks is informative about their stock-specific and overall risk and can also help to predict future risks. This shows that ESG factors should be considered within an institution's risk management framework.

Hoepner (2013) finds that incorporating ESG considerations into a portfolio improves both the volatility and tail risk of portfolios. Figure 7 shows the results of this study, which analyses the risk return profile of ESG portfolios across three asset classes. The analysis divides each asset class into companies that have strong ESG practices (+ ESG), average practices (Neutral) and poor practices (- ESG). Results show that companies which rank well under certain ESG criteria have a lower tail risk. This reduction in tail risk is particularly pronounced in emerging markets where tail risk is halved when comparing poor scoring ESG companies with positive scoring companies.

Figure 7: Risk and return profiles of risk analysed asset classes

		Average values p.a. over 20 years		
	Return/Risk Metric	Expected Return	Volatility	CVaR1 95 % (12M)
Equity Developed	+ ESG Equity World	7.5%	15.2%	-25.7%
	Neutral ESG Equity World		20.2%	-38.1%
	- ESG Equity World		25.8%	-52.7%
Equity Emerging Markets	+ ESG Equity Emerging Markets	8.5%	19.2%	-38.8%
	Neutral ESG Equity Emerging Markets		27.9%	-64.5%
	- ESG Equity Emerging Markets		37.3%	-91.2%
Corporate Bonds	+ ESG Corporate Bonds	5.3%	4.8%	-4.9%
	Neutral ESG Corporate Bonds		6.1%	-8.1%
	- ESG Corporate Bonds		7.6%	-11.5%

Source: Risklab (2011) Responsible investing reloaded.

Tail risk and preservation of capital is particularly vital in central bank reserve management. While reserves have traditionally been managed very conservatively in the past, reserve managers are now holding a wider variety of asset classes within their portfolios, including corporate bonds and equities. Adding riskier assets such as these may increase portfolio risk, yet ESG has been shown to significantly reduce tail risk and the probability of extreme losses. For example, Volkswagen lost over a third of its market value in the two days following the emissions scandal of 2015, while BP lost over half of its shareholder value after the 2010 oil spill. In short, losses resulting from ESG factors may be rare but can be extreme, the very definition of tail risk[29].

24 University of Oxford and Arabesque Asset Management (2014) From the Stockholder to the Stakeholder, Smith School of Enterprise and the Environment

25 Fulton (2012) Sustainable investing: Establishing Long-Term Value and Performance

26 CFA Institute (2015) Environmental, Social, and Governance Issues in Investing: A Guide for Investment Professionals

27 EFAMA (2016) Responsible Investment Report

28 CalPERS, 2015. Analysis conducted by Wilshire over the period 1/1/2001 to 31/12/2012.

29 Mark Carney (2016) Resolving the climate paradox

However, it is not just the risks of ESG issues that are financially relevant but also the opportunities and benefits of sustainable reform. Reducing greenhouse gas emissions is estimated to decrease company costs by $780 billion over a 10 year period. Returns on these cost-saving investments can also materialise over shorter time horizons and equating to an estimated internal rate of return of 34%[30]. These studies show that ESG factors have a real impact on financial returns and should be considered as part of investment decisions on economic and financial grounds.

Incorporating ESG can also impact portfolio construction and strategic asset allocation. A Mercer study found that climate policy could account for 11% of portfolio risk, attributable to the implied cost of carbon and emissions levels and developments in low carbon technologies[31]. Strategic asset allocation is usually based on quantitative historical analysis which is unlikely to capture climate change risk as it is both unprecedented and difficult to quantify.

D) Conflicts of interest – avoiding the politicisation of investment decisions

As official institutions expand their investment universe to include equities and corporate bonds, questions around conflicts of interest inevitably arise. While the Securities and Exchanges Commission (SEC) acknowledges the benefits of sovereign investment, they also highlight the potential conflicts, such as the informational advantages that government entities may have as well as the complexities of government institutions having significant commercial power as well as political influence[32]. Similarly, the European Union notes a number of benefits of SWF investment, including 'supporting the international role of the euro'[33] but also raises concerns about investments being made for political reasons. Backer (2010) discusses the 'difficulty of separating what is effectively a close connection between economic activities of states and the legal systems enacted by those very states[34].' Furthermore, Bauer (2015) suggests that investing domestically can undermine macroeconomic objectives and public accountability[35]. There are a number of examples of these potential conflicts of interest coming to fruition. In 1988, the British Competition Commission (formerly Monopolies and Mergers Commission) concluded that a 22% stake in oil company BP held by the Kuwait Investment Authority was likely to be against public interest due to national security concerns and conflicts of interest[36]. There is also significant evidence of SWFs investing for strategic rather than purely financial purposes as shown in analysis by Dyrck and Morse (2011) and Johan et al (2011).

These discussions have resulted in increased scrutiny and improved transparency among many official institutions. Truman (2008), a strong advocator of SWF transparency, created the Sovereign Wealth Fund Scorecard which ranks funds based on their transparency and accountability[37]. Truman (2016) regularly assesses SWF improvements and notes that while progress has been made in some areas, improvements are disparate with many falling short of 'what the citizens of their countries or the international community should expect with regard to their transparency and accountability.' Another interesting point is that Truman's transparency scores do appear to be correlated with institutions that have adopted an ESG policy. Although Truman's analysis looks primarily at SWFs and therefore excludes a number of national pensions and central banks, on average institutions who adopted ESG had higher transparency scores. If we return to the 30 largest official institutions in our analysis (see section 1 and appendix), the average transparency score of ESG adopters is 91, while the average score for non adopters was 57.

The focus on transparency also led to the creation of the Santiago Principles for SWFs by the International Working Group of Sovereign Wealth Funds (IWGSWF). The Group emphasises the importance of transparency to ensure investment decisions are made on a purely financial basis. Specifically, Principle 19 is as follows.

GAPP 19. The SWF's investment decisions should aim to maximize risk-adjusted financial returns in a manner consistent with its investment policy, and based on economic and financial grounds.

GAPP 19.1. Subprinciple. If investment decisions are subject to other than economic and financial considerations, these should be clearly set out in the investment policy and be publicly disclosed.

GAPP 19.2. Subprinciple. The management of an SWF's assets should be consistent with what is generally accepted as sound asset management principles.

Research has demonstrated that ESG factors have a tangible and significant effect on financial returns (see section 2.C) which shows that ESG principles are consistent with the Santiago Principles. However, the concept of responsible investment is broader than purely financial considerations. Similarly, official institutions have wider objectives such as universal ownership, economic responsibility and reputational damage. While these factors are not based on purely financial measures, they are likely to have an indirect financial impact. Broader investment considerations remain consistent with the Principles, as long as any other factors that influence investment decisions are defined and publicly disclosed, as stated in GAPP 19.1.

30 Investment Leaders Group, University of Cambridge Institute for Sustainability Leadership (2014) The Value of Responsible Investment. CDP (2013) Carbon Action Report

31 Mercer (2011) Climate Change Scenarios – Implications for strategic asset allocation

32 E. Tafara (2008) Testimony concerning the regulatory framework for sovereign investments

33 Commission of the European Communities (2008) A common European approach to Sovereign Wealth Funds

34 Backer (2010) Sovereign investing in times of crisis: global regulation of sovereign wealth funds, state owned enterprises and the Chinese experience

35 A. Bauer (2015) Six reasons why sovereign wealth funds should not invest or spend at home

36 Thatcher (2012) Western policies towards sovereign wealth fund equity investments: A comparison of the UK, the EU and the US

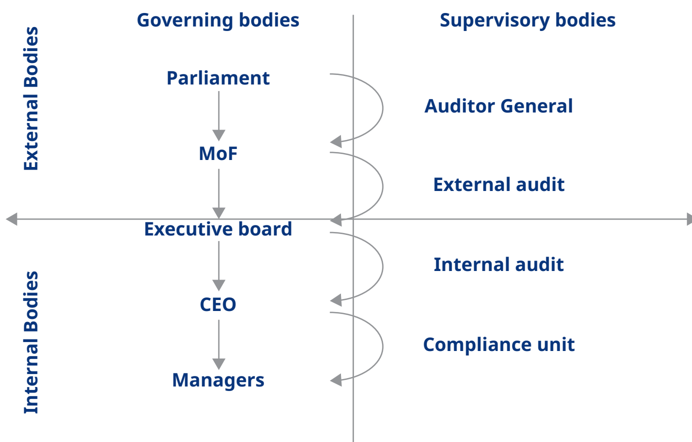
37 Truman (2016) Uneven progress on sovereign wealth fund transparency and accountability

3. The challenges for official institutions when adopting ESG

A) Governance models – where does ESG fit?

Having strong governance and a transparent investment process is vital to ensuring investment decisions fit with the investment philosophy and objectives of the institution. The IMF discusses the importance of distinguishing between governing and supervisory bodies, as well as defining clear roles and responsibilities for each body.

Figure 8: Governance structure of sovereign wealth funds



Source: Al-Hassan et al (2013) Sovereign wealth funds: Aspects of governance structures and investment management, IMF working paper.

We have divided ESG governance models into two categories: integrated and separated. The former is when ESG decisions are part of the overall investment process while the latter is when ESG considerations are separated from investment decisions. ESG integration is more common among official institutions and has been adopted by institutions including NZSF (shown in Figure 9), CPPIB and NGPFG. We believe this is the most effective way of ensuring that the risk and return characteristics of ESG factors are fully incorporated in the investment process.

Another important aspect of sound ESG integration is the responsibility for ESG within the governance framework. For example, the Norwegian Ministry of Finance retains many of the management responsibilities of NGPFG, including ethical investment decisions. While NZSF has greater independence from the government, ethical investing is ingrained in the fund's objectives and legislation; the New Zealand Superannuation and Retirement Income Act of 2001 states that ethical investment is a necessary part of the investment policy[38].

Figure 9: New Zealand Superannuation Fund (NZSF) governance of responsible investment

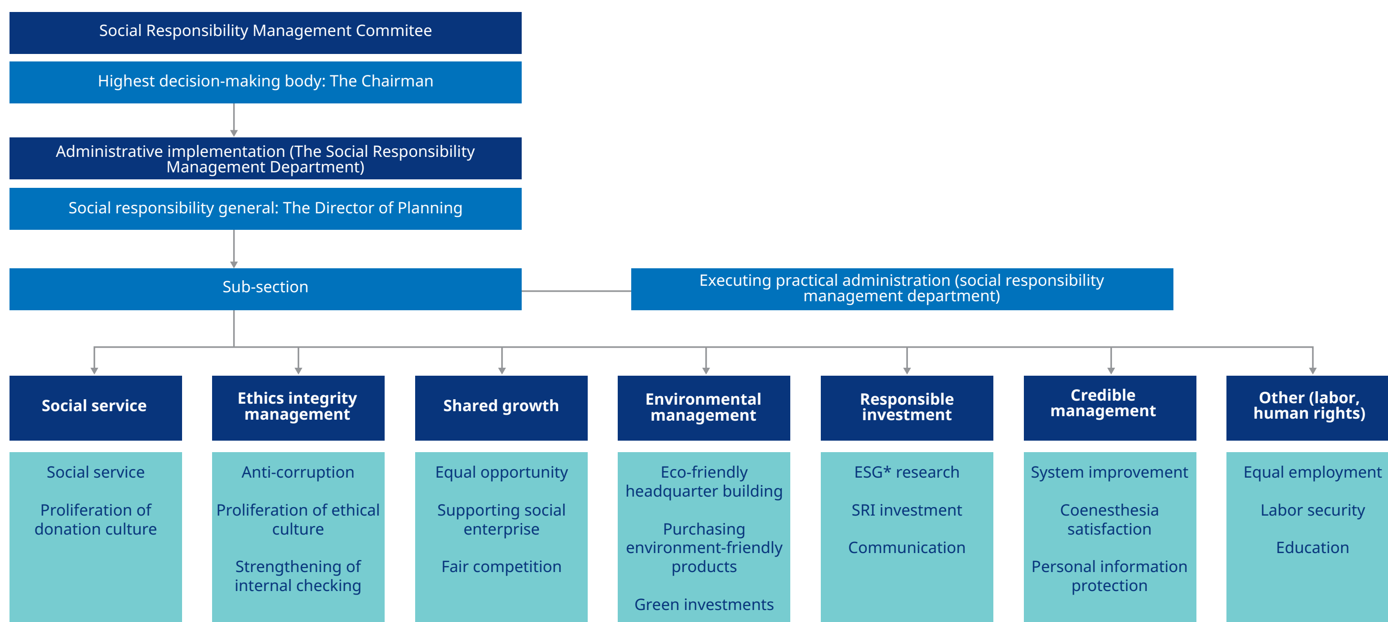
Governance, Policy and Strategy	Mandate, Beliefs, Values, Philosophy				
Work streams	**Integration P1**	**Ownership P2**	**Disclosure (Company Reporting) P3**	**Best Practice and Collaboration P4and 5**	**Communication P6**
Standards and Benchmarks	UNPRI (Principles 1-6) – UN Global Compact (all principles as they are issue specific) – Other good practice standards e.g. ICGN				
Activities and Procedures (examples)	– Integrate ESG factors into the Risk Allocation Process (RAP) – Integrate RI guidelines for opportunities and asset classes – Positive Investment – Integrate ESG into Manager selection, monitoring & conviction, and direct investment due diligence	– Stewardship over investment portfolios – Direct and collaborative ngagements with companies – NZ&Global Corporate Governance& Voting guidelines – Portfoio Monitoring – Apply exdusions	– ESG Reporting standards for companies – Carbon Disclosure Project – Encourage good practice reporting by NZ companies	– Participation in Forums and working groups – Engagement with regulators and advisors – Collaboration with CFIs and global peers	– Public reporting of RI activity and benchmarking – Internal reporting – Stakeholder engagement

Source: NZSF, 2016.

In contrast, the National Pension Service of Korea (NPS) has a separate management committee to focus on social responsibility, as shown in Figure 10. Under NPS, responsible investment is a sub-section of this committee while other areas of focus include social service and labour security. NPS also specifies that ESG is considered in the context of nonfinancial performance, which indicates why it is not a component of the investment process. While there are some advantages to having a separate board focusing on social responsibility, namely expertise and commitment, this structure is likely to ignore the financial impact of ESG.

38 New Zealand Superannuation and Retirement Income Act 2001

Figure 10: Social responsibility structure of the NPS



* ESG (Environment, Society, Governance): It refers to the corporate nono-financial performance, as related to the environment, society and governance.

Source: NPS Social Responsibility Report.

B) No simple answer to ESG integration

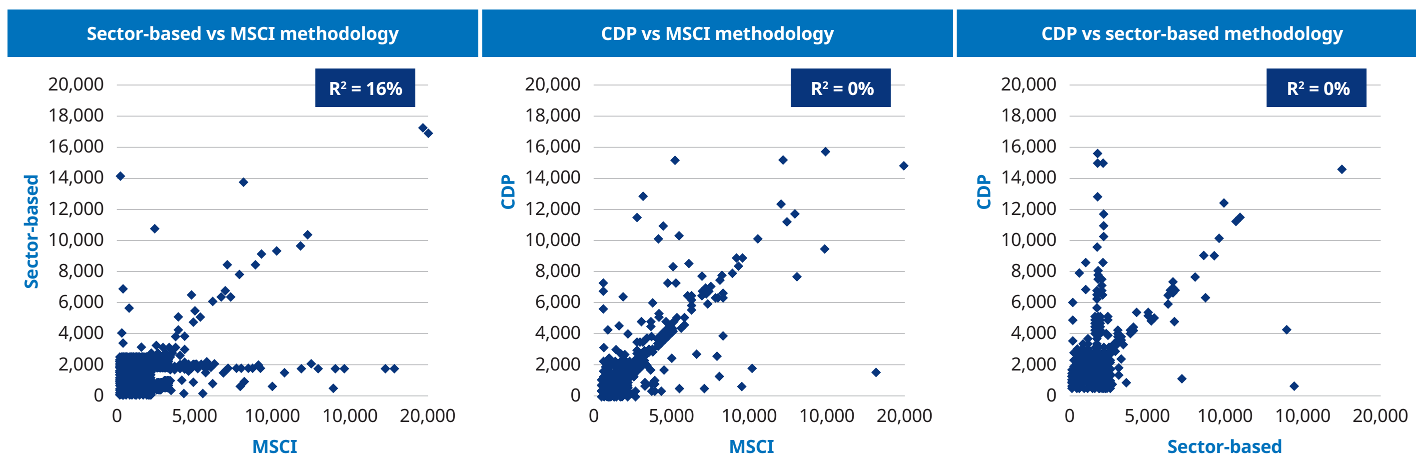
While implementing an exclusionary ESG strategy is relatively simple, integrating ESG analysis into investment processes remains resource intensive given data quality. A PRI report on integrated analysis states that 'the difficulty of acquiring consistent, comparable, audited information remains a significant hurdle to integrated analysis[39]. Similarly, KPMG evaluate the strength of ESG reporting globally and find that although more companies are reporting on corporate responsibility, the overall quality of disclosures has fallen in both the Americas and Europe[40]. An example of integrated ESG analysis is shown overleaf, demonstrating the extent of the analysis required to look at both a company and the industry. While ESG reporting seems to be improving, momentum needs to be maintained through demand from asset managers and asset owners. While passive ESG approaches are popular, we believe that asset owners should also be aware of their limitations, which mainly reflect poor quality of some historic data.

For example, many strategies look to deliver an index with a lower than benchmark carbon footprint. This appears to be a simple answer. However, closer inspection highlights significant variations in the estimates different research firms reach for the same companies. Those differences result from the need to estimate intensities of companies which do not report GHG emissions to ensure a balanced view of portfolio footprints. On average, only around 40% of the large global companies included in the MSCI ACWI benchmark report scope one or two emissions; estimates are used for most large companies and results are therefore sensitive to the methodologies different research firms use.

We have looked overleaf at three of the most common approaches, (i) MSCI's carbon intensity analysis, (ii) CDP estimates for companies in high impact sectors and (iii) a methodology using sector average intensities for those companies which do not report data, used by many firms including Bloomberg. There is little relationship between the three methods. More than one-third of CDP's estimates are over 50% different to the values MSCI uses. Almost one-half of the sector-based estimates are similarly wide of MSCI estimates.

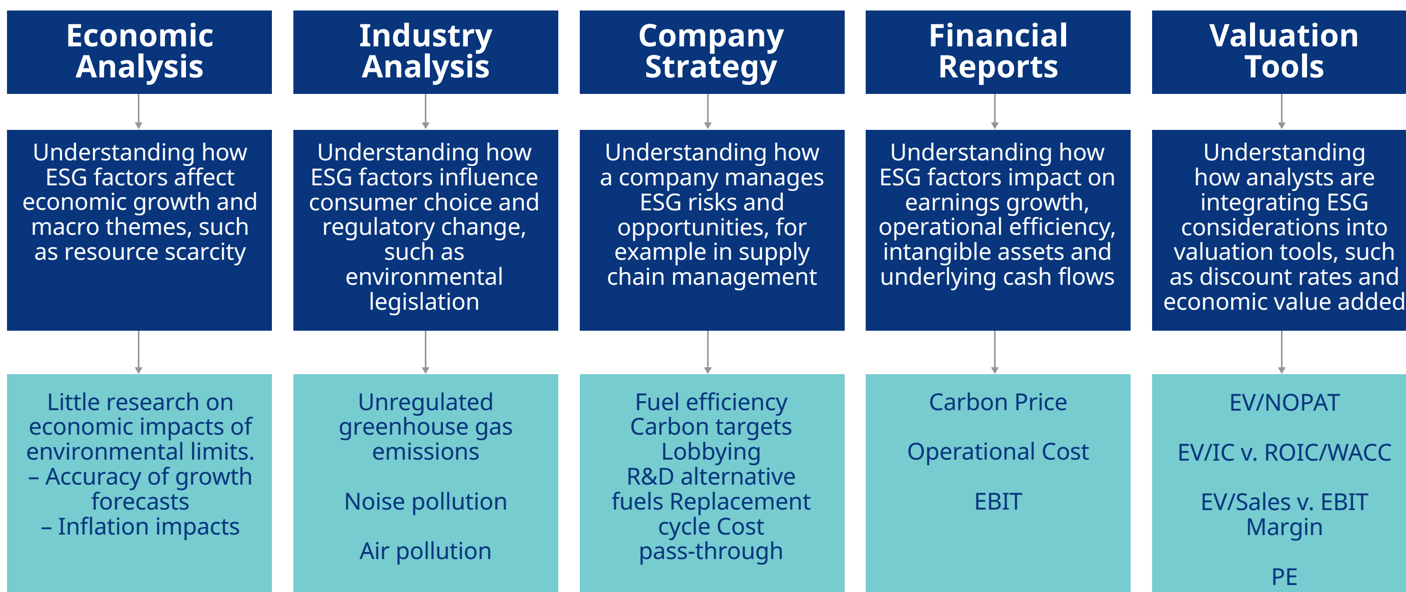
39 Principles of Responsible Investment (2013) Integrated Analysis
40 KPMG (2015) International Survey of Corporate Responsibility Reporting

Figure 11: Correlations between different carbon footprint methodologies



Source: MSCI, CDP, Datastream, Schroders 2017. Axes are logarithmic.

Figure 12: Integrating ESG factors into stock valuation



Source: Principles of Responsible Investment (2013) Integrated Analysis.

Similarly, just buying an ESG rating from at third party may not be enough. Despite similar-sounding approaches, the main ESG rating organisations can reach very different conclusions for the same companies. On average, across over 1,600 stocks in the MSCI World benchmark, only 26% of the scores assigned by one of the two largest rating agencies can be explained by the scores the other agency assigns to the same companies (the "R-squared" value). For example, online marketplace eBay is a strong top quartile performer according to Sustainalytics, but a bottom quartile laggard in MSCI's assessment. Both sources cannot possibly represent the definitive view of companies' ESG strengths.

Using an investment manager to implement ESG investing can alleviate the resource burden by delegating day to day investment decisions and in-depth company analysis. However, evaluating an investment manager's ESG credentials requires careful consideration and continuous monitoring.

Conclusion

Responsible investing is gaining traction across official institutions, with many of the world's largest sovereign investors now considering ESG factors in their investment decisions. From a financial standpoint, ESG factors have been shown to have tangible effects on the financial performance of companies, demonstrating why they need to be considered in the context of investment decisions. However, there are a number of other reasons why official institutions should consider integrating ESG factors into their investment process.

The breadth and scale of official institution portfolios means that many ESG issues, such as climate change, will inevitably impact returns even if companies with poor ESG ratings are screened out. This reiterates the value of engaging with companies to change industry practice, rather than simply excluding companies from the investment universe. The size and stature of many official institutions means that engagement can be particularly effective in changing company practice. The link between ESG factors and financial performance in well documented, with ESG considerations improving tail risk and volatility of portfolio returns. However, official institutions have wider considerations in addition to financial performance which make ESG factors a vital consideration. Reputational risk is of paramount importance to any government-related institution with issues related to ethics and ESG usually gleaning the most attention. Similarly, conflicts of interest also need to be appropriately managed with additional complications arising from the possibility of sovereign investors politicising investment decisions.

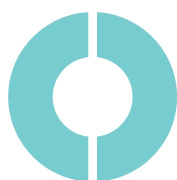
There remain some challenges for official institutions looking to adopt ESG. Deciding where ESG fits within the government framework depends on the ESG motivations and beliefs of the institution. However, a significant body of evidence demonstrates that ESG is relevant to financial performance and therefore should be integrated into the investment process. Another challenge is the resource required to engage with companies and actively vote on corporate issues. Delegating ESG investment to an investment manager can reduce some of the day to day burdens of ESG analysis, while ensuring that the risks and opportunities of ESG are being considered.

Official institutions have adopted both active and passive approaches to ESG. Evidence suggests that passive exclusions have limitations with regards to their effectiveness in protecting portfolios, partly driven by the poor quality of ESG data. While ESG data and reporting is improving, there is still work to be done. However, active ESG strategies are more likely to bring about industry change and improve overall portfolio performance in the long-run

ESG is no longer on the side-lines of sovereign investment and has now been adopted by some of the largest official institutions. The impact of ESG approaches on portfolio risk alone should be reason enough for official institutions to look closely at these issues. More broadly, responsible investment is something that official institutions should be considering to ensure investment decisions are robust, effective and sustainable.

Key takeaways:

1. **Risk first: ESG approaches have been shown to reduce financial risk and can mitigate other non-financial risks relevant to official institutions, such as reputational risk.**
2. **Integration and engagement are key: Passive ESG approaches have significant limitations, particularly for large 'universal' asset owners. Ensuring an institution adopts an effective and robust ESG approach is paramount.**
3. **Asset owners are moving rapidly: 43% of official institutions' assets are covered by some form of publicly disclosed ESG policy and this is only going to grow over the coming years as scrutiny on public asset owners increases.**



References

AQR (2016) Assessing risk through environmental, social and governance exposures

Backer (2010) Sovereign investing in times of crisis: global regulation of sovereign wealth funds, state owned enterprises and the Chinese experience

Bauer (2015)
Six reasons why sovereign wealth funds should not invest or spend at home

Bindseil, Gonzalez, Tabikis (2009)
Risk management for central banks and other public investors

BIS (2009)
Issues in the governance of central banks

CDP (2013)
Carbon Action Report

CFA Institute (2015) Environmental, Social, and Governance Issues in Investing:
A Guide for Investment Professionals

Commission of the European Communities (2008)
A common European approach to Sovereign Wealth Funds

CPPIB (2016)
Sustainable investing

Dimson, Karakas and Li (2012)
Active ownership

Dyck and Morse "Sovereign Wealth Fund Portfolios."
Chicago Booth Working Paper No. 11-15, 2011.

Fulton (2012) Sustainable investing:
Establishing Long-Term Value and Performance

G20/OECD (2015)
Principles of Corporate Governance

Hoepner, (2013) ESG data:
Can it enhance returns and reduce risk?

IMF (2001)
Guidelines for foreign exchange reserve management

IMF (2016) Working Paper:
Central bank governance and the role of nonfinancial risk management

International Working Group of Sovereign Wealth Funds (2008)
Sovereign Wealth Funds Generally Accepted Principles and Practices "Santiago Principles"

Investment Leaders Group, University of Cambridge Institute for Sustainability Leadership (2014)
The Value of Responsible Investment.

Johan, Knill and Mauck. "The Determinants of SWF investment in private equity.
" Working Paper, 2011.

Kim (2007)
A China environmental health project fact sheet: Transboundary air pollution – will China choke on its success?

Kirkpatrick (2009)
The Corporate Governance Lessons from the Financial Crisis

KPMG (2015)
International Survey of Corporate Responsibility Reporting

Mercer (2011)
Climate Change Scenarios – Implications for strategic asset allocation

Norges Bank Investment Management (2015)
Responsible investment

North Carolina Department of the State Treasurer (2016) Long term stewardship:
A pragmatic approach for ESG integration for institutional investment

NZSF (2015)
Why we believe responsible investing pays off

NZSF (2016) ESG viewpoint:
Emission management in carbon intensive sectors

PRI Association and UNEP Finance Initiative (2011) Universal Ownership:
Why environmental externalities matter to institutional investors

PRI (2013)
Integrated Analysis

Shirreff (2008)
Lessons from the collapse of hedge fund, long-term capital management

Tafara (2008)
Testimony concerning the regulatory framework for sovereign investments

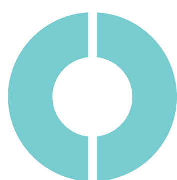
Thatcher (2012)
Western policies towards sovereign wealth fund equity investments: A comparison of the UK, the EU and the US

The World Bank and FAO (2009) The Sunken Billions:
The Economic Justification for Fisheries Reform

Truman (2016)
Uneven progress on sovereign wealth fund transparency and accountability

University of Oxford and Arabesque Asset Management (2014)
From the Stockholder to the Stakeholder

Young (2009)
The Committee on Foreign Investment in the United States and the Foreign Investment and National Securities Act of 2007: A delicate balancing act that needs revision



Appendix
30 largest official institutions

Name	Country	Region	OI type	AUM (USD Bn)	ESG/RI Policy	Truman score
Government Pension Investment Fund (GPIF)	Japan	Asia	NP	1240	YES	83
Norwegian Government Pension Fund Global	Norway	Europe	SWF	922	YES	98
Netherlands ABP	Netherlands	Europe	NP	444	YES	92
Korea National Pension Service (NPS)	South Korea	Asia	NP	409	YES	
California Public Employees' Retirement System (CalPERS)	USA	North America	SP	311	YES	95
Canada CDPQ	Canada	North America	SP	271	YES	91
CPPIB	Canada	North America	NP	221	YES	94
California State Teachers' Retirement System (CalSTRS)	USA	North America	SP	196	YES	
Employees Provident Fund	Malaysia	Asia	NP	161	YES	
AP Fonden (all)	Sweden	Europe	NP	153	YES	
Future Fund	Australia	Asia	SWF	92	YES	87
Labour Pension Fund	Taiwan	Asia	NP	67	YES	
China Investment Corporation (CIC)	China	Asia	SWF	814	NO	70
Abu Dhabi Investment Authority (ADIA)	UAE	Middle East	SWF	792	NO	58
Kuwait Investment Authority	Kuwait	Middle East	SWF	601	NO	68
SAMA Foreign Holdings	Saudi Arabia	Middle East	SWF	533	NO	
Hong Kong Monetary Authority Investment Portfolio	Hong Kong	Asia	SWF	463	NO	
SAFE Investment Company (State Administration of Foreign Exchange)	China	Asia	SWF	441	NO	
Government of Singapore Investment Corporation	Singapore	Asia	SWF	350	NO	61
Qatar Investment Authority	Qatar	Middle East	SWF	335	NO	40
National Social Security Fund (NSSF)	China	Asia	NP	295	NO	59
Central Provident Fund (CPF)	Singapore	Asia	NP	278	NO	
Investment Corporation of Dubai	UAE	Middle East	SWF	199	NO	
Saudi Arabia Public Investment Fund	Saudi Arabia	Middle East	SWF	183	NO	
Temasek Holdings	Singapore	Asia	SWF	180	NO	76
EPFO	India	Asia	NP	128	NO	49
Abu Dhabi Investment Council	UAE	Middle East	SWF	112	NO	33
Korea Investment Corporation	South Korea	Asia	SWF	108	NO	78
National Welfare Fund	Russia	Europe	SWF	72	NO	49
Kazakhstan National Fund	Kazakhstan	Asia	SWF	65	NO	48

Source: Sovereign Wealth Fund Institute, latest available as at April 2017.
Malaysia EPF, Singapore CPF and Abu Dhabi Investment Council taken from annual reports. AP Fonden estimates from Investment Pensions Europe as at December 2014.
This data is for illustration only and Schroders makes no assurances of the accuracy of this information. Truman scores as at 2015.
SWF – sovereign wealth fund, NP – national pension, SP – state pension.

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