



Executive Doctorate in Business Administration

“ESG in Private Equity and other alternative asset classes: What the industry has accomplished so far regarding Environmental, Social and Governance matters.”

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May 2020

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The Business Science Institute and the iaelyon School of Management do not approve or disapprove the opinions expressed in this thesis. These opinions are to be considered as those of the author.

Dedication

This thesis is dedicated to my family and,
in particular, to my wife, the joy and love of my life.

Acknowledgement

My special appreciation goes to my supervisor Prof. Dr. André Reuter for his continuous support, encouragement, and guidance. I value the conversations we had, his instrumental thoughts, sound comments, and valuable directions. I would also like to thank Prof. Dr. Anne Bartel-Radic and Prof. Dr. Dr. Thomas Gergen for their useful technical advice and Prof. Dr. Marco Heimann for his helpful expertise.

I am grateful for the knowledge I have gained through discussions and seminars.

“Every accomplishment starts with the decision to try.”

- John F. Kennedy

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II. Abstract:

Over the last years, the rise of sustainability and responsibility has drawn considerable attention by the entire society including businesses. Companies have integrated corporate social responsibility into their business model as a kind of self-regulation, and the way businesses invest has led to socially responsible investing, but it is nowadays accepted that environmental, social, and governance matters cover all the sustainability and responsibility topics and what exactly shall be focused on. This applies to the financial sector and the alternative industry as well, which includes Private Equity, Real Estate, Infrastructure, Private Debt, and Venture Capital. The research question is therefore what Private Equity and other alternative asset classes have accomplished so far in relation to environmental, social, and governance matters, what they say and what they really do, what they have in fact implemented, and what differences between the actors do exist. This topic has to date not been addressed entirely or solved by academia and research. Hence, in total 117 firms have been researched representing 76,2% of the world's total alternative assets. In order to analyze the research question initially the growing demand for sustainability and responsibility will be shown followed by an analysis how environmental, social, and governance has emerged. Then, it will be presented what environmental, social, and governance in business means and what it can achieve, followed by what alternative asset classes are. Afterwards, it will be discussed how environmental, social, and governance impact financial performance before legal requirements will be addressed. Then, the status quo will be pointed out previous to literature and industry research review, a quantitative and qualitative methodology, data and findings, their discussion, limitations and potential future research, recommendations and conclusion. The thesis at hand will show that alternative managers from Australia and Europe do better than the ones from China and North America. Bigger firms are more advanced than smaller ones. The Infrastructure asset class is more environmental, social, and governance affine than others, and asset managers that invest in more than just a single asset class are better placed. In summary, it was found that more and more alternative managers implement these practices and further enhance their approaches.

Keywords: Sustainability, Responsibility, Corporate Social Responsibility, Socially Responsible Investing, Environmental Social and Governance, Private Equity, Real Estate, Infrastructure, Private Debt, Venture Capital

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V. Table of Abbreviations:

AUM	Assets Under Management
CC	Corporate Citizenship
CFP	Corporate Financial Performance
CSR	Corporate Social Responsibility
DD	Due Diligence
ESG	Environmental, Social and Governance
EU	European Union
GP	General Partner
Infra	Infrastructure
IPO	Initial Public Offering
KPI	Key Performance Indicator
LP	Limited Partner
LPA	Limited Partnership Agreement
Luxembourg	Grand-Duchy of Luxembourg
PD	Private Debt
PE	Private Equity
PPM	Private Placement Memorandum
PEI	Private Equity International
RE	Real Estate
SMEs	Small and Medium Sized Companies
SRI	Socially Responsible Investing
SDGs	Sustainable Development Goals
UN PRI	United Nations Principles for Responsible Investment
VC	Venture Capital

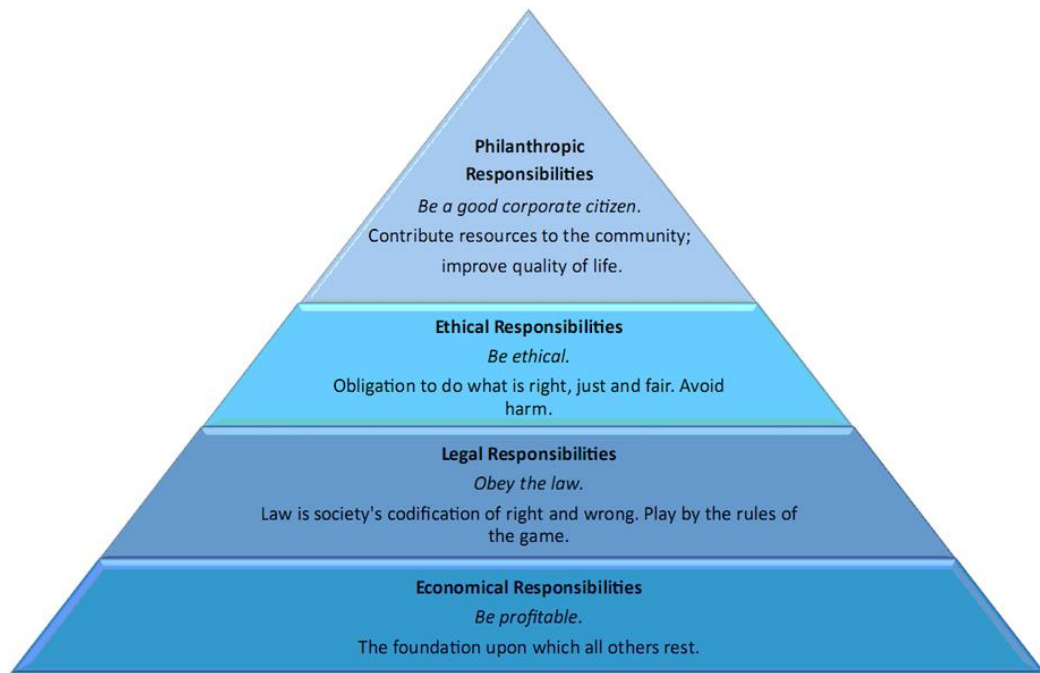
1. Introduction

This thesis addresses and questions what Private Equity (PE) and other alternative asset classes have accomplished so far in relation to environmental, social, and governance (ESG) matters, what they say and what they really do, what they have in fact implemented, and what differences between the actors do exist. It covers an industry that is enormously power- and meaningful and a topic that can be considered as one of the most socially beneficial ones of our times. It is about investing for a premium financial return without sacrificing for societal impact, as the threats to the future of humanity are real. PE and other alternative managers were so far not perceived to be particularly concerned about ESG, as the industry mainly cares about making money. But this changed in the last years, because the two things are not anymore seen as mutually exclusive. ESG is no longer seen as nice-to-have or as a way to placate stakeholders. Alternative asset managers are uniquely positioned to care about positive change in the long term, while public stock markets initiatives may take years, as their performance is linked to quarterly earnings. Sustainability and responsibility have earned a voice, but the question is if the alternative industry is really making the world a better place. It will be found out if ESG in PE and other alternative asset classes is still a niche existence espoused by a few or already mainstream, a hands-on preoccupation.

1.1. Topicality of Sustainability and Responsibility

The rise of sustainability and responsibility has drawn considerable attention over the last years. The energy revolution from fossil to renewable energy, waste reduction, plastic in the oceans, recycling matters, equality, diversity and inclusion as well as the recent “Me Too” campaign against sexual harassment and sexual assault, and regulatory and legal breaches such as Enron, WorldCom and the Madoff investment scandal are discussed intensively by the public, governments, the media and academia. Sustainability and responsibility are not only societal or political challenges; they concern the business world, too. In the past, considering sustainability and responsibility was seen by many as a philanthropic approach, an ethical or moral choice or a behavior of demonstrating a desire to be an engaged corporate citizen. An important attempt to bridge the gap between economics and other responsibilities was offered by Archie B. Carroll with his pyramid of corporate social responsibility (CSR).

Figure 1: Pyramid of CSR¹



An increasing number of shareholders, analysts, regulators, governments, authorities, activists, labor unions, employees, clients and consumers, supply chain partners, investors, lenders, insurers, community organizations, and news media are asking companies to be accountable for sustainability and responsibility issues. There is increasing demand for transparency, and expectations grow that companies should act sustainable and responsible and should measure, report, and improve their performance on a regular basis. Timing and public awareness lead to a shift in the investment climate towards sustainable capital spending. In addition, an increasing awareness of the importance of non-financial risks for the sustainability of a company has been established, and it is now desired to truly integrate sustainability and responsibility into all business processes for long-term value creation. According to the European Sustainable Investment Forum and its 2018 report, ESG integration has grown by 60% since 2016 and represents more than EUR 4 trillion in assets under management (AUM)². Globally sustainable investing AUM in 2018 stood at USD 30.7 trillion, which is a 34% increase in two years and in the US at USD 12 trillion, which is an increase of 38% since 2016³.

¹ Carroll A. (1991)

² <http://www.eurosif.org/eurosif-2018-sri-study-launch-event/>

³ https://www.ussif.org/files/GSIR_Review2018F.pdf

However, these figures mainly account for public stock markets and much less for alternative asset managers. But PE and other alternative asset classes nowadays concern everybody of us, and every day we deal with their investments and their portfolio companies. They brew the coffee we drink, they make the pancakes we eat, they publish the newspaper we read, they produce the clothes we wear, they own the doctors' practices and hospitals we visit, the shops where we buy the stuff for our pets, they own the apartments we rent and the shopping centers we go to, the rental car we use, the burger and the ketchup we eat, the telephone and internet lines we use, the medicine we need, the theme parks we enjoy, the hotels we stay at, and they finance the start-ups we admire. And on top, their investors pay our pensions and provide our insurance coverage.

1.2. Research Objectives

However, research in relation to ESG matters and what asset managers have accomplished so far focuses on public financial markets and mutual stock funds. The potential impact concerning PE and other alternative asset classes has received less attention, and not much has been published that links the topic directly with what the industry has achieved until now in relation to ESG. It is discussed that alternative asset managers should be ESG compliant and how they can achieve it. It is further noted that they have started to address the topic since a few years and that stakeholders, in particular, investors demand the integration of ESG. The trend as such is appreciated, and the benefits of the implementation are observed. It is even noticed that the industry in general is keen to enhance its ESG efforts.

But it is not yet assessed how many firms deal with it, just a few well-known ones, a majority, or almost all of them. Differences can exist when it comes to geographic location. Asset managers in Europe might have another approach to ESG than their competitors from the USA, Asia or Australia. Cultural differences can also exist as well as the size of the firms can have an impact. Small companies might view ESG different than medium sized or large ones. It could also be dependent on the specific asset class. One or the other might require more attention than others. In case they are engaged in ESG, it can be just a light approach. If it is an advanced one, it can be assessed what exactly is done and to what extent the companies are committed and what the industry has accomplished so far, and if there is a distinction between pretense and reality.

But it is a topic and a problem that has to date not been entirely addressed or solved by academia and research, not the matter as such nor in relation to the different kind of asset managers. Academic research is even underrepresented compared to analysis made by financial magazines and newspapers, advisory and consulting firms, and industry organizations, which are in general published online. Academic studies just take some time, but the alternative industry is a fast-moving market. Others can cover this topic easier and quicker. Advisory and consulting firms, and industry organizations do look thoroughly at what is going on, too. Their clear advantage is that they are closely connected with the alternative industry as their clients, be it for advisory and consulting, tax or audit. They can obtain industry knowledge easier and quicker, and senior executives of the asset managers are happy to accommodate and take part in surveys. This thesis aims to present what PE and other alternative asset classes have accomplished so far regarding ESG matters, what they say and what they do.

Different design procedures would be possible to approach the research question. At first, the alternative industry can be analyzed in general, and then the results be assessed, in particular. This is in fact what this thesis aims for. But the other methods should be considered, too. It would be possible to assume that ESG is, in particular, relevant for PE and other asset classes, the industry can then be analyzed, and the results be evaluated in general. However, the research question already implies the fact that something is done, and this shall not be questioned as such. It shall be researched what alternative managers have accomplished so far. Going one step further, the best approach is to assume that ESG is of relevance, to analyze the industry in general, to evaluate and possibly question the assumption and the found data, and to assess the results.

Therefore, it is necessary to evaluate a significant large sample of the industry from all major regions, considering all kinds of enterprise sizes, and specific asset classes. Some information showing what they say and what they do is even easily to track down, but it has to be assessed in more detail how comprehensive their ESG engagement is, and what they really have implemented, or in contrast what they not do. Once the asset managers are assessed and based on the experiential realm, the inputs found will then be used to evaluate the entire industry by means of a scoring system to understand how advanced it is.

In order to analyze the research question at first the growing demand for sustainability and responsibility will be shown followed by an investigation how ESG has emerged. Subsequently, it will be presented what ESG in business means and what it can achieve, followed by what PE and other alternative asset classes are. Afterwards, the impact of ESG on financial performance will be discussed before legal requirements will be addressed. Then, the status quo will be pointed out previous to the main part with literature and industry research review, methodology, data and findings, their discussion, limitations of the research, future research suggestions, recommendations and conclusion.

1.3. The Growing Demand for Sustainability and Responsibility

The last financial crisis as of 2007 and 2008 has strongly damaged the reputation of the financial sector and was caused by poor corporate governance⁴. Globally, out of 15 business sectors fewest people trust in financial services and indicate that they are not doing what is right⁵. But the rise in concern over sustainability and responsibility issues has not only been driven by the last financial crisis. The importance also comes from the growing recognition that resources previously taken for granted are likely to be seriously constrained in the future or that previous behavior is just not adequate anymore. This presents remarkable social and strategic governance challenges for the entire society, including businesses.

Even clients and consumers now have certain expectations about a company's business practices, and that has encouraged companies to introduce sustainability and responsibility in a way that was not foreseen years ago. In particular, the young, the Generation Y, born between the 1980s and the end-1990s and Generation Z that are born since then are "fans of socially responsible investments"⁶. Extreme weather conditions, the school strikes for climate that are also known as Fridays for Future, Youth for Climate, or Youth Strike for Climate are international movements that raise awareness and fighting against inequality and to promote diversity and inclusion is nowadays part of the zeitgeist.

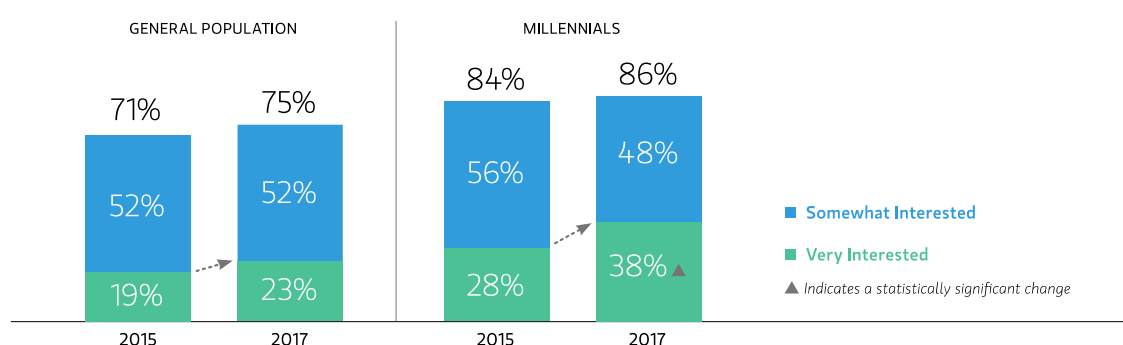
⁴ Kirkpatrick G. (2009)

⁵ https://www.edelman.com/sites/g/files/aatuss191/files/2019-02/2019_Edelman_Trust_Barometer_Global_Report_2.pdf

⁶ <https://www.economist.com/finance-and-economics/2017/11/25/sustainable-investment-joins-the-mainstream>

According to the Deloitte Global Millennial Survey 2019 of more than 16,000 Millennials and Generation Z from 42 countries, 46% and 47%, respectively, want to make a positive impact on society and the environment. For 29% of both generations climate change and protecting the environment are the top concerns, and with only 12% they give businesses the lowest rating concerning their achievements to improve and protect the environment⁷. 42% would start or deepen a relationship with a business that has products or services that positively impact the environment or society, and 38% would even stop or lessen a relationship that negatively impacts the environment or society. In the coming decades, the Baby Boomer Generation will pass on trillions of dollars, and it is estimated that as of 2020 Millennials may control up to USD 24 trillion. According to a report published by Credit Suisse and the Young Investors Organization, 86% of the Generation Y or Z are interested in sustainable and impact investment products⁸. In one of the world's largest survey of young people initiated by the World Economic Forum, the 2017 Shapers Survey, more than 30,000 young people from 186 countries around the world with an age between 18-35 identified climate change and destruction of nature as their biggest concern with conflicts and wars being only second and inequality ranked third⁹. One could therefore conclude that most young people are aligned with some key aspects of sustainability and responsibility.

Figure 2: Interest in Sustainable Investing¹⁰



⁷ <https://www2.deloitte.com/global/en/pages/about-deloitte/articles/millennialsurvey.html>

⁸ <https://www.credit-suisse.com/about-us-news/en/articles/media-releases/credit-suisse-joins-forces-with-yio-to-launch-next-generation-re-201905.html>

⁹ <http://www.shaperssurvey2017.org>

¹⁰ <https://www.morganstanley.com/press-releases/morgan-stanley-survey-finds-investor-enthusiasm-for-sustainable->

Morgan Stanley revealed in a 2017 study that interest in sustainable investing has grown¹¹, which not only counts for Millennials but also for the general population, however the young would purchase two times more often from a sustainable brand, would three times more likely seek for employment with a sustainable company, and would two times more often invest in companies with an ESG background.

In their Global Investor Study 2017, asset manager Schroder surveyed over 22,000 investors from 30 countries and found out that among the Millennials more than 50% are inclined to choose sustainable investments and 40% of Generation X and only 31% of the Baby Boomer Generation would do the same¹². 88% of the Millennials thinks that sustainable investments are today more important than five years ago, and 70% have already invested in sustainable funds. On a lower level, this trend also counts for Generation X and the Baby Boomers, as for 78% of all investors sustainable investments is now more important, and 64% have already invested.

Companies have already started addressing sustainability and responsibility, and nearly all of them advertise that they see the benefits from introducing such strategies¹³. Most of the Fortune Global 500 companies publish more or less sophisticated sustainability or responsibility reports on their websites, be it Walmart, Volkswagen, Royal Dutch Shell, Apple or Berkshire Hathaway as biggest financial company.

A recent research has revealed that out of the 600 largest public companies in the USA nearly 400 reduce their carbon footprint, more than 300 manage water resources, and nearly 300 protect human rights¹⁴. Another example is General Electric with its “Ecomagination” brand that was launched in 2004 and shall source revenues from social and environmentally friendly products. According to the 2008 Ecomagination annual report, this project was the company’s biggest source of growth during the last financial crisis¹⁵.

¹¹ <https://www.morganstanley.com/press-releases/morgan-stanley-survey-finds-investor-enthusiasm-for-sustainable->

¹² https://www.schroders.com/en/media-relations/newsroom/all_news_releases/schroders-global-investor-study-2017-sustainable-investing-on-the-rise/

¹³ Belkaoui A., Karpik P. (1989)

¹⁴ <https://www.ceres.org/resources/roadmap-for-sustainability>

¹⁵ <https://www.ge.com/ca/about-us/ecomagination/reports>

And recently, nearly 200 CEO of companies including Amazon, Apple, General Motors, Pepsi, and Walmart said that shareholder value is no longer their main objective and that instead they would protect the environment, invest in their employees, and deal ethically and fairly¹⁶. Now, a larger number of companies than ever is engaged in serious efforts to define and integrate sustainability or responsibility into their businesses, and, in particular, the industry market leaders go ahead¹⁷, but it seems that the finance world is still a little bit lacking behind the traditional industries.

1.4. From CSR to Sustainability and Responsibility to ESG

In order to assess any accomplishment of the alternative industry, as a start it is to be shown what concepts of sustainability and responsibility exist.

In the last decades, several approaches for sustainability and responsibility have been developed. In 1953, a first formal definition of CSR was developed by US economist Howard Bowen¹⁸. He stated, *“it refers to the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action, which are desirable in terms of the objectives and values of our society”*.

Another well-recognized definition is from Archie B. Carroll, another pioneer of CSR research who stated that *“the social responsibility of business encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time”*¹⁹. However, CSR then only came into common use in the 1980s after multinational corporations created the term “stakeholder”, meaning a person or group on whom an organization's activities have an impact. First of all, R. Edward Freeman described in his stakeholder theory corporate owners beyond shareholders such as *“employees, consumers, suppliers, local communities, policymakers, environment, and society at large”*²⁰.

¹⁶ <https://www.nytimes.com/2019/08/19/business/business-roundtable-ceos-corporations.html>

¹⁷ <https://hbr.org/2019/02/yes-sustainability-can-be-a-strategy>

¹⁸ Bowen H. (1953)

¹⁹ Carroll A. (1979)

²⁰ Freeman E. (2010)

Today, CSR and sustainability and responsibility in business are often used interchangeably with many other terms, like corporate responsibility, corporate conscience or conscious capitalism, which stands for the right and wrong as demonstrated by the actions of a company, corporate citizenship (CC) that refers to a company's responsibility towards society, social enterprises, which addresses social and environmental matters²¹, sustainable development, business or corporate ethics, and triple-bottom line that proposes that companies shall also focus on social and environmental concerns²².

The movement to sustainability and responsibility applies to financial firms as well. The loss of public trust in the financial sector in the light of the recent economic crisis caused many firms to rethink and to integrate sustainable and responsible activities into their strategies and business processes. At the same time, the crisis and the behavior of certain financial institutions has raised questions if shareholder value maximization should be the main and only business purpose²³. The management of non-financial matters for the long-term sustainability of financial institutions has now become more important and leads to social investment, or sustainable or ethical investing or just socially responsible investing (SRI), which is "*an investment process that integrates environmental, social and corporate governance considerations into investment decision making*"²⁴, and it involves two main approaches. Negative screening is used to avoid certain investments like tobacco, alcohol, pornography, gambling, investments in conflicting countries, dirty industries or weapons or companies that do not fulfill certain standards for example regarding child labor. However, negative screening can potentially cause problems, as it can restrict investment decision greatly and therefore exclude many companies. An example that the researcher has personally experienced is a company that has developed a software for website presences, and this was then used by the Playboy magazine. One could question if the Playboy magazine is considered as pornography, and if all the other customers the software company has make it better in case, they are not controversial.

²¹ Wood D. (1991)

²² <https://hbr.org/2018/06/25-years-ago-i-coined-the-phrase-triple-bottom-line-heres-why-im-giving-up-on-it>

²³ Jones T., Felps W. (2013)

²⁴ Renneboog, L., Horst, J., Chendi Z. (2008)

Positive screening seeks out specific investments in like for example clean energy companies, climate change, education, community building, health care and wellness. Such screens can be normative, based on ESG matters, or just best-in-class, selecting those companies in the sector that apply ESG best. However, true ESG investing goes beyond SRI, which just excludes certain investments or sectors. ESG applies to all sectors and screens firms that either score positively or negatively on its metrics. Another approach is shareholder activism or also called shareholder advocacy during the holding period, fostering ESG in portfolio companies, as alternative managers usually exercise an active ownership and their voting rights that lead towards maximization of stakeholder value²⁵.

While CSR is seen as a form of corporate self-regulation integrated into the business model, SRI describes how companies shall invest, but ESG covers all the topics and what exactly firms shall focus on. ESG is seen as the three pillars of sustainability²⁶. And nowadays ESG has become accepted as the generic term for performance indicators and making sure that systems are in place to ensure accountability²⁷. Also, the vast majority of sustainability and responsibility frameworks and guidelines use ESG as their standard term, but the concept of sustainability and responsibility and what it stands for has evolved over time, and although definitions might vary, they usually agree on what is of basic importance.

However, many have a general idea of what ESG is or have set up their own concept. The “E” for environmental might be more easily to grasp. It stands for pollution or hazards for example for soil and air, greenhouse gas emissions, energy efficiency, renewable energy, waste and natural resources management and recycling but also for clean and green technologies. The “S” for social is already a bit more difficult to understand. One can subsume human rights, working conditions, health and safety, social welfare, data protection and privacy, product quality, supply chain and customer management, equality, diversity and inclusion, antidiscrimination, corporate citizenship including community engagement. The last dimension is the “G” for corporate governance and maybe the most ambiguous term.

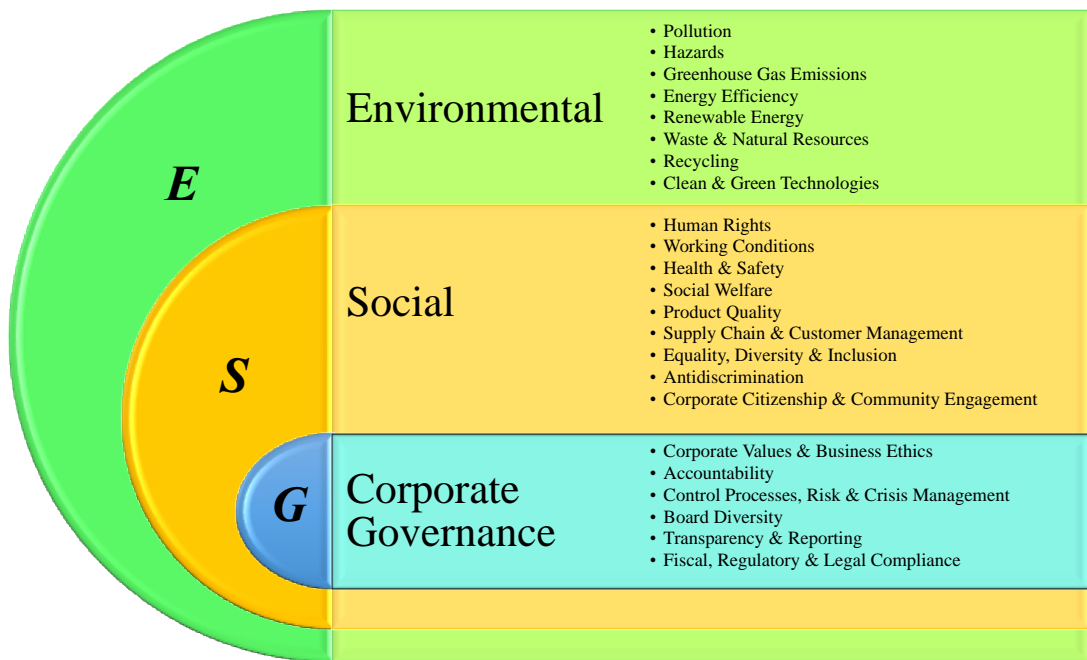
²⁵ Sparkes R. (2001)

²⁶ Staub-Bisnang M. (2012)

²⁷ https://www.db.com/cr/de/docs/Sustainable_Investing_2012.pdf

It concerns corporate values and business ethics, accountability, control processes, risk and crisis management, board diversity, stakeholder dialogue, transparency and reporting but also self-evident matters like fiscal, regulatory, and legal compliance.

Chart 1: What ESG Stands For



Even if ESG has gained more and more attention in the recent years, the concept as such is by far not new. For many years, it was dictated by confraternities, but it was more about ethical investments. In 1139, the Second Council of the Lateran of the Catholic Church prohibited the use of everything, which was not in line with the Old Testament²⁸. And in the 18th century the Quakers prohibited its members to trade slaves, and the Methodist Church in the United Kingdom forbid so called “sin stocks” of companies that are engaged in guns, liquor, tobacco or gambling²⁹. In the 20th century, investments were influenced by politics. Dow Chemical faced protest for producing napalm during the Vietnam War, and during this time the first sustainable retail fund was launched in the USA in 1971 that was called Pax Fund³⁰. Going forward, concerns about the cold war and the buildup of arms were raised, and during the apartheid government people divested from companies that operated in South Africa³¹.

²⁸ Zarbafi M. (2011)

²⁹ Asongu J. (2007)

³⁰ Sparkes R. (2001)

³¹ Schueth S. (2003)

A first famous attempt to formalize sustainability and responsibility was the Brundtland report by the former Norwegian prime minister Gro Harlem Brundtland as chair of the World Commission on Environment and Development, which was published by the United Nations in 1987³². It addressed sustainability development, and although it was not the first time that an international organization dealt with the topic, it placed it firmly on the political agenda. In the following years, several mutual stock funds were launched that were environmentally oriented, and pension funds received more attention from the public and, in particular, from the media questioning their social impact, and the responsibility of investing came into focus³³. The Kyoto Protocol of the third United Nations Climate Change Conference as of 1997 committed countries by setting non-binding emission reduction targets³⁴.

Then in 2005 the United Nations Secretary General, Kofi Annan, in coordination with the United Nations Environment Program Finance Initiative and the United Nations Global Compact invited a group of individuals representing 20 of the largest institutional investors from 12 countries and a group of stakeholders of 70 persons that brought together experts from intergovernmental and governmental organizations, academia, civil society, and the investment industry, to draw up voluntary and aspirational guidelines for the investment industry to address environmental, social, and governance issues³⁵.

The direct result of the initiative of Kofi Annan in 2005 was the United Nations Principles for Responsible Investment (UN PRI), launched in April 2006, which were the first set of internationally recognized standards for the financial industry. Since then, the number of signatories and the assets under management they represent has increased significantly. Signatories to the UN PRI are amongst other banks, insurance companies and pension schemes but also PE firms and other alternative asset managers. And as of today, the UN PRI are the largest responsible investment initiative in the world, representing more than half of the world's professionally managed assets.

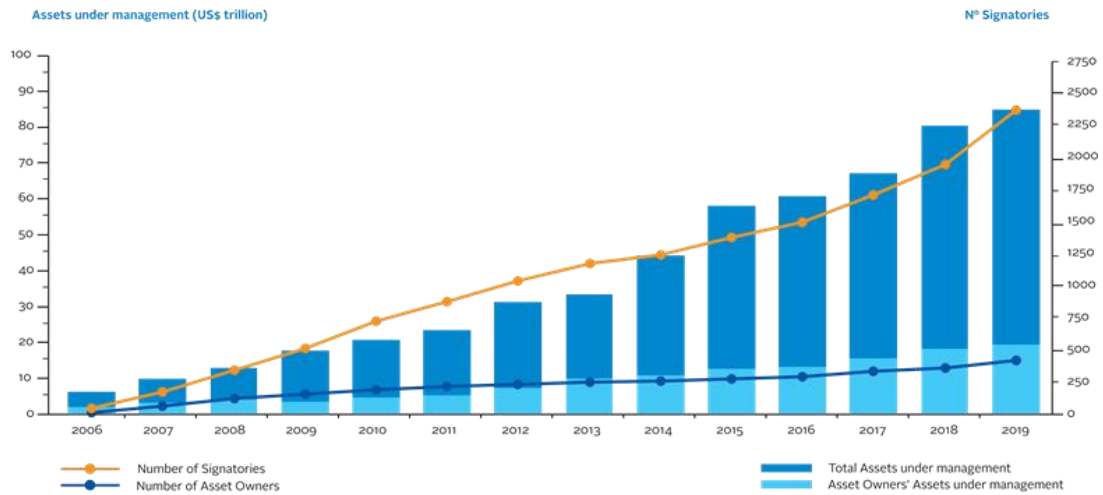
³² <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>

³³ Dumas C., Louche C. (2016)

³⁴ https://unfccc.int/kyoto_protocol

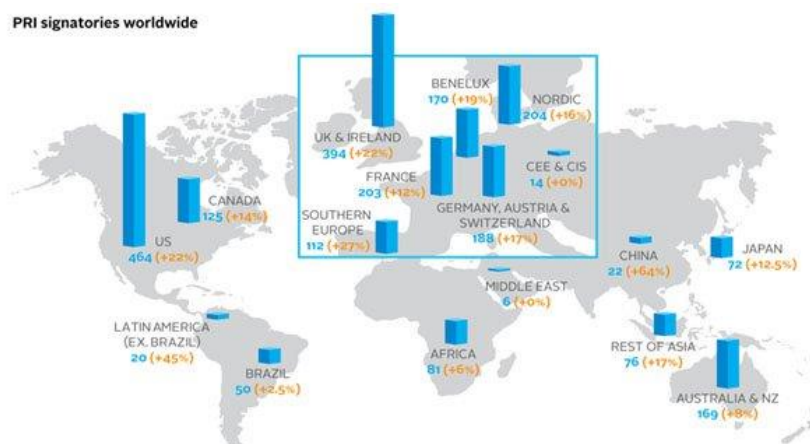
³⁵ www.unpri.org

Figure 3: UN PRI AUM and Signatories³⁶



As of February 2020, UN PRI signatories have almost USD 90 trillion in AUM. At the beginning, the UN PRI had nearly the same amount of asset owners than investment managers, but now investment manager signatories represent over 70% of the signatories and more than 50% of the AUM of the Wilson Towers Watson Top 500 investment managers globally. The 2018 reporting of the UN PRI counted 431 PE and other alternative asset managers that managed USD 1.05 trillion, which represented more than a third of the worldwide AUM, which was estimated by data provider Preqin of USD 2.83 trillion as of June 2017³⁷. In addition to the growth in numbers, the geographic diversity increased as well.

Figure 4: UN PRI Signatories Worldwide³⁸



36 www.unpri.org
 37 www.preqin.com
 38 www.unpri.org

Most of the signatories from PE and other alternative sectors are headquartered in Europe, but the AUM is almost equally split between Europe and North America, because the companies in the US and Canada are larger ones.

The commitment of the signatories is as follows:

“As institutional investors, we have a duty to act in the best long-term interests of our beneficiaries. In this fiduciary role, we believe that environmental, social and corporate governance (ESG) issues can affect the performance of investment portfolios (to varying degrees across companies, sectors, regions, asset classes and through time).

We also recognize that applying these Principles may better align investors with broader objectives of society. Therefore, where consistent with our fiduciary responsibilities, we commit to the following:

- 1. We will incorporate ESG issues into investment analysis and decision-making processes.*
- 2. We will be active owners and incorporate ESG issues into our ownership policies and practices.*
- 3. We will seek appropriate disclosure on ESG issues by the entities in which we invest.*
- 4. We will promote acceptance and implementation of the Principles within the investment industry.*
- 5. We will work together to enhance our effectiveness in implementing the Principles.*
- 6. We will each report on our activities and progress towards implanting the Principles.*

The Principles for Responsible Investment were developed by an international group of institutional investors reflecting the increasing relevance of environmental, social and corporate governance issues to investment practices. The process was convened by the United Nations Secretary-General.

In signing the Principles, we as investors publicly commit to adopt and implement them, where consistent with our fiduciary responsibilities. We also commit to evaluate the effectiveness and improve the content of the Principles over time.

We believe this will improve our ability to meet commitments to beneficiaries as well as better align our investment activities with the broader interests of society.

We encourage other investors to adopt the Principles”.

The 55th United Nations General Assembly in 2015 set eight goals aiming at combating poverty, hunger, disease, illiteracy, environmental degradation, and discrimination against women³⁹, and later in the year in September, the United Nations General Assembly represented by all 193 member states adopted the Sustainable Development Goals (SDGs)⁴⁰, which are, “*no poverty; zero hunger; good health and well-being; quality education; gender equality; clean water and sanitation; affordable and clean energy; decent work and economic growth; industry, innovation, and infrastructure; reducing inequality; sustainable cities and communities; responsible consumption and production; climate action; life below water; life on land; peace, justice, and strong institutions; and partnerships for the goals*”.

Figure 5: Sustainable Development Goals⁴¹



³⁹ https://www.undp.org/content/undp/en/home/sdgooverview/mdg_goals.html

⁴⁰ <https://sustainabledevelopment.un.org>

⁴¹ Ibidem

The 17 SDGs and its 169 individual targets shall guide the sustainable development priorities of the global community from now until the year 2030. The SDGs are understood as the globally agreed sustainability framework and shall provide investors with an understanding of sustainability relevant to their investment activity and their fiduciary duties⁴². The SDGs act as guidance as to what the “*broader objectives of society*” are, as mentioned in the preamble of the UN PRI. Later in 2015, the Paris Agreement of the 21st United Nations Climate Change Conference brought the first ever legally binding global climate deal that was adopted by 195 countries⁴³.

In the meantime, alternative industry organizations like the American Investment Council⁴⁴, formerly the Private Equity Growth Capital Council, Invest Europe⁴⁵, previously European Private Equity & Venture Capital Association, and the British Private Equity and Venture Capital Association⁴⁶ have set up own frameworks and guidelines for responsible investments, and the Australian Investment Council⁴⁷, previously Australian Private Equity and Venture Capital Association is asking its members to consider the UN PRI or the guidelines of the British Private Equity and Venture Capital Association. The China Venture Capital and Private Equity Association has published a code of conduct that says that its members shall adhere to sustainable development but not engage in investment activities that harm public interest, endanger public security, or damage ecological environment⁴⁸.

The last centuries have provided some economic cycles like the steam energy, electricity, mass automation, computing and IT. It seems that the layers of ESG, its risks and opportunities represent the next one. But, in order to assess what PE and other alternative asset managers have achieved so far, it is essential to analyze why they should integrate ESG in their business and what ESG in business means at all.

⁴² <https://www.unpri.org/sdgs/investors-and-the-sustainable-development-goals/304.article>

⁴³ <https://unfccc.int/process-and-meetings/the-paris-agreement/what-is-the-paris-agreement>

⁴⁴ <https://www.investmentcouncil.org/guidelines-for-responsible-investing/>

⁴⁵ <https://www.investeurope.eu/industry-standards/responsible-investment/>

⁴⁶ <https://www.bvca.co.uk/Our-Industry/Responsible-Investment>

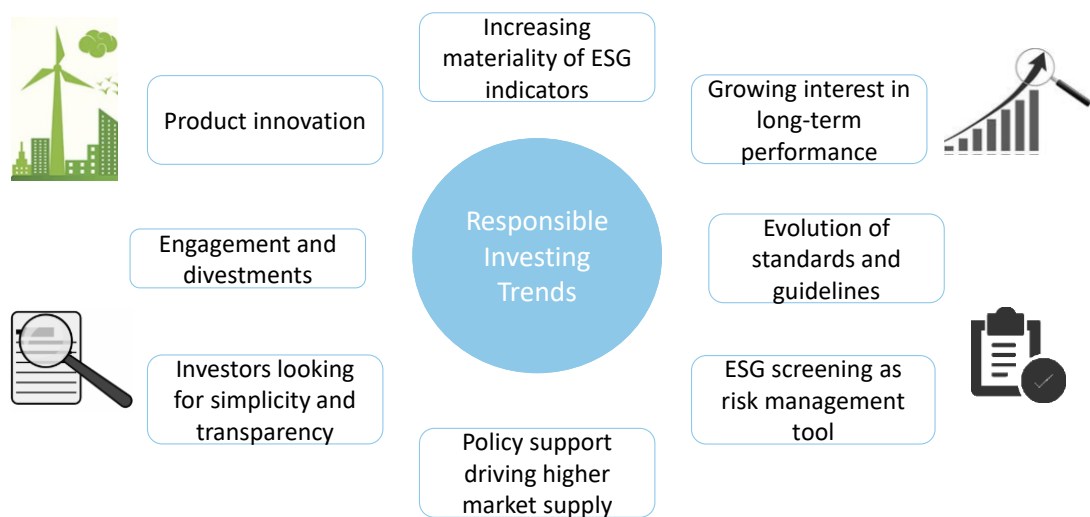
⁴⁷ <https://www.avcal.com.au>

⁴⁸ <http://www.cvca.org.cn/aboutcvca/CodeofConduct.asp>

1.5. Firm Value, Innovation, Risk Management, and Reputation

Companies have formalized and implemented certain standards like ISO 9001 for quality management, or environmental norms from the ISO 14000 family like ISO 14007 to determine environmental costs and benefits, ISO 14008 for the monetary valuation of environmental impacts and aspects, or ISO 14009 for climate related metrics for the finance sector, and ISO 26000 for social responsibility. However, such standards are above all stand-alone processes, but the trend for more responsibility cannot be denied anymore, and it is revealed variously.

Figure 6: Responsible Investing Trends⁴⁹



It is true that considering environmental, social and governance factors could amongst others enhance processes and lead to reduced costs or open new markets⁵⁰, but these is not the only advantages. It is clear what ESG stands for, but in relation to businesses, it covers a wide range of topics, and they can all be seen as key performance indicators (KPI). The objective is to transform non-financial factors into financial drivers and to finally create value. The consideration of ESG aspects even provides competitive advantages for asset managers, as they can utilize information that competitors might not or only insufficiently include in their acquisition process⁵¹.

⁴⁹ <https://www.luxflag.org>

⁵⁰ <https://hbr.org/2009/09/why-sustainability-is-now-the-key-driver-of-innovation>

⁵¹ https://www.db.com/cr/de/docs/Whitepaper_ESG_422.pdf

1.5.1. Non-Financial Drivers and ESG Key Performance Indicators

Energy efficiency, the reduction of carbon emissions, waste reduction and recycling can contribute to increased revenues, but they also positively affect operational efficiency, brand equity, cost of capital, and risk management.

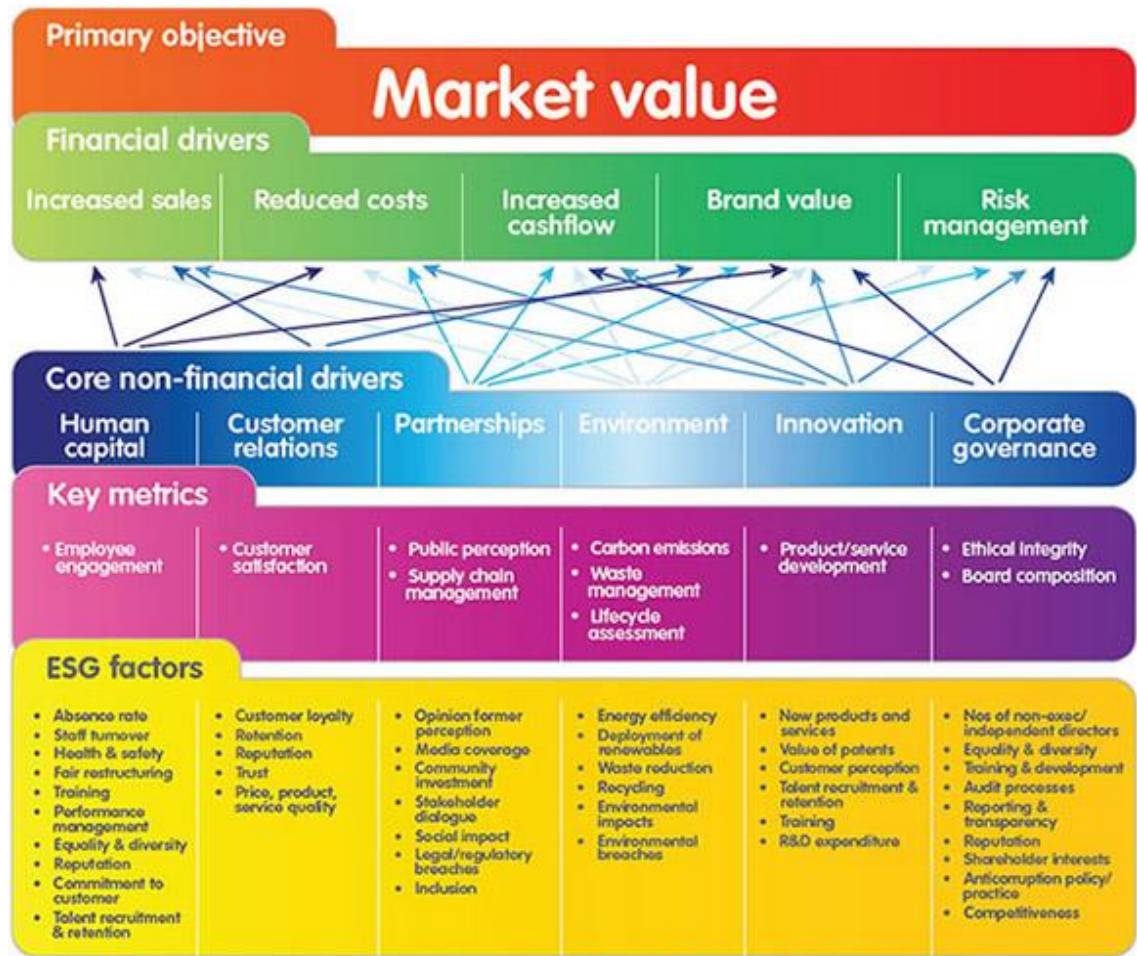
Social matters are even more numerous. They concern for example the workforce of businesses. Talent retention, equality and diversity, training, health and safety that decrease absence rates and staff turnover are considered as employee engagement and can again contribute to increased revenues, but they also positively affect operational efficiency, brand equity, cost of capital, and risk management.

There is sometimes even a smooth transition in relation to certain non-financial drivers. For example, equality and diversity are on the one hand social matters, but they can be seen as good corporate governance, too, which can have the same positive effect on businesses. Ethical behavior, legal and regulatory compliance, reporting and transparency as well as stakeholder engagement like environmental and social efforts also increase the reputation of businesses, minimize risks, and ensure the license to operate. Ultimately, there are certainly dozens if not hundreds of different non-financial drivers that depend on the business model of each company, amongst others its products and services, its suppliers and customers, its market, its corporate structure, its community it operates in, and every business, each company has to assess its requirements and opportunities, its own KPIs.

An attempt to list some of the ESG KPIs was done by the European Alliance for CSR in 2006, an organization of the European Union (EU) Commission, a group for enterprises sharing the ambition to make Europe a center of excellence on CSR in support of a competitive and sustainable companies and market economy. The alliance explored how the ESG performance of companies might impact drivers of business success, and how investors can benefit, and it developed a framework that highlights the interaction between firms and investors and the corporate performance evaluation⁵². It identifies six main areas of core non-financial drivers, each with between five to ten KPIs.

⁵² <http://www.investorvalue.org/framework.html>

Figure 7: EU CSR Alliance Laboratory Framework⁵³



1.5.2. Value Creation, Risk Management and Reputation

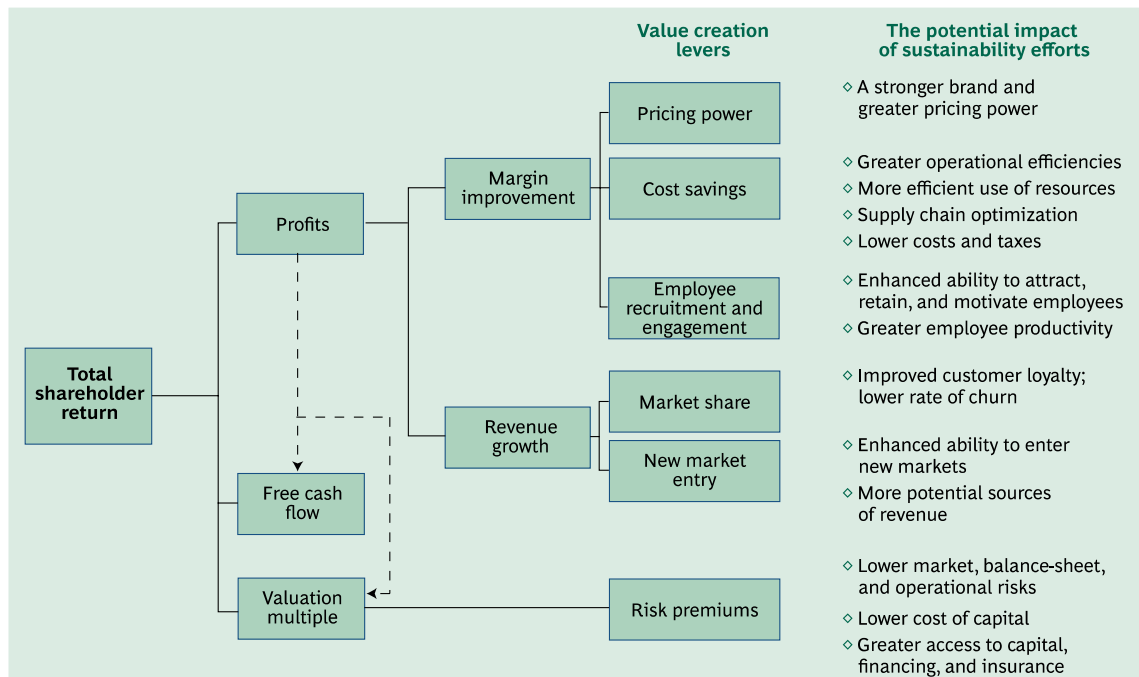
In 2009, the Boston Consulting Group and MIT Sloan Management Review established the Sustainability Initiative and launched a global survey of 1,560 business leaders and 462 persons from academics, government officials and executives of non-profit organizations about their views on the intersection of sustainability and business strategy⁵⁴. It was found that there is a strong consensus that sustainability has and will further materially impact on how companies operate, but the underlying drivers are highly complex, interrelated, and lasting. However, sustainability is seen as a source to provide many opportunities, for example to reduce costs, create new revenue streams, improve financial returns and to develop new business models.

⁵³ <http://www.investorvalue.org/framework.html>

⁵⁴ <https://sloanreview.mit.edu/projects/the-business-of-sustainability/>

Moreover, the economic, social and also political impacts of sustainability are part of value creation in the short and long term, as it affects all aspects of a company's operations. Several tangible and intangible costs and benefits for sustainability have been identified, which can have a meaningful impact on value creation.

Figure 8: BCG and MIT Sloan Value Creation⁵⁵



Further intangible resources have been observed that can drive growth. Companies with a high sustainability approach have established more distinct organizational processes also in relation to stakeholder engagement in general, are more focused on long-term value creation, and provide better nonfinancial information as such than firms with a low sustainability attitudes⁵⁶. The involvement of CSR measures decreases investment inefficiencies and therefore increases investment efficiencies⁵⁷. The effect is even greater when it comes to matters that are directly concern primary stakeholders like employees, product quality, the environment, and diversity and apply a little bit less to secondary ones like community engagement.

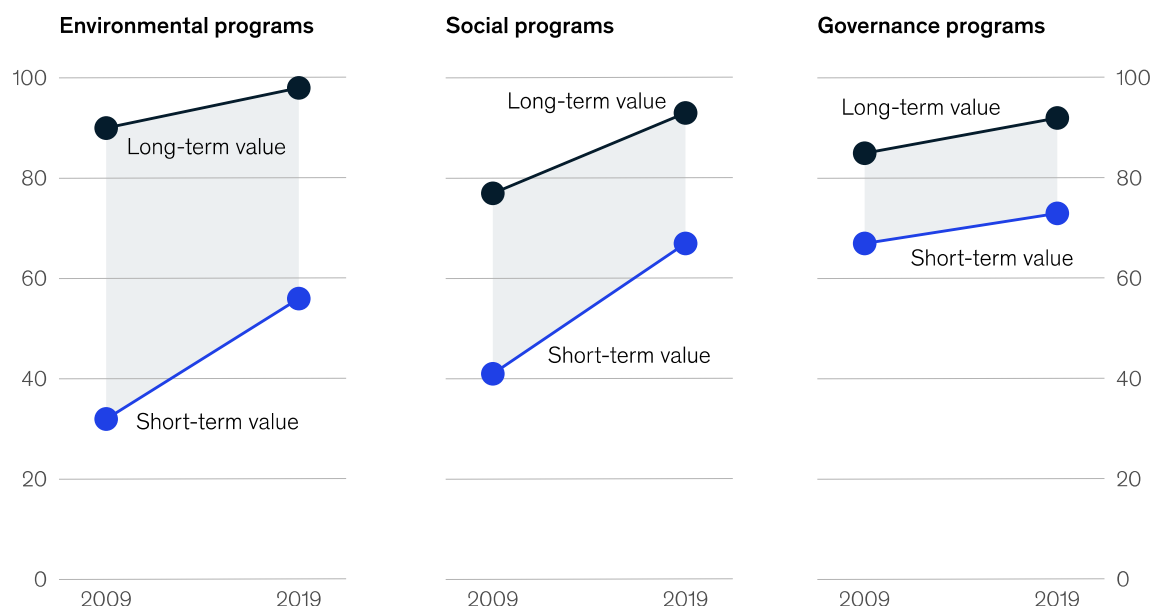
⁵⁵ <https://sloanreview.mit.edu/projects/the-business-of-sustainability/>

⁵⁶ Eccles R., Ioannou I., Serafeim G. (2014)

⁵⁷ Benlemlih M., Bitar M. (2018)

CSR strategies also positively affect employee diversity, the company's relationship with them, and product quality and, hence, increase the firm value⁵⁸. A survey conducted by consultancy firm McKinsey & Company in 2019 with 558 executives and investment professionals from all regions, industries, and company sizes revealed that ESG programs create value over the short and the long term, and only 3% do not believe it, and 14% say that they are unsure, which is a significant increase compared to a previous survey ten years ago⁵⁹. In addition, a willingness was indicated to pay a 10% median premium for companies with an overall positive ESG record, a quarter would have paid 20-50%, and 7% even more than 50%.

Figure 9: Value Creation of ESG Programs 2009 to 2019⁶⁰



Furthermore, CSR integrating social, environmental and governance concerns can increase innovation in relation to products, for example redesigned products and new technologies as well as new and enhanced processes⁶¹, which can lead to better and more business opportunities, a competitive advantage, firm growth and therefore create value.

⁵⁸ Hoje J., Maretto A. (2011)

⁵⁹ <https://www.mckinsey.com/business-functions/sustainability/our-insights/the-esg-premium-new-perspectives-on-value-and-performance>

⁶⁰ Ibidem

⁶¹ Bocquet R., Le Bas C., Mothe C., Poussing N. (2017)

However, the full potential can only be achieved if a strategic approach has been set up that fully integrates ESG into the business model rather than just a responsive behavior “*acting as a good corporate citizen, attuned to the evolving social concerns of stakeholders, and mitigating or anticipating adverse effects from business activities*”⁶². And all kinds of companies can benefit, large ones and small and medium sized companies (SMEs)⁶³, and they are all targets of PE and other alternative asset classes. In addition, sustainability and responsibility provide another competitive advantage, as it contributes to and enhances customer satisfaction⁶⁴.

Another positive effect of ESG comes from intangible assets, such as enhanced reputation and superior risk management, which in turn could avoid unnecessary costs and mitigate any harm that could threaten a company. Sustainable and responsible behavior has already been recognized as a factor that influences reputation⁶⁵. And, in particular, reputation reflects the perception of stakeholders of the ability of a company to deliver value along key dimensions of performance⁶⁶. Institutional investors often hold large, global and highly diversified portfolios and are therefore dependent on a healthy overall economy. Failure of ESG matters can negatively impact the global economy, or certain countries or sectors, as it affects the entities they invest into, which can be seen as a macroeconomic risk. As the cash flow of portfolio companies is mainly used to pay back the leverage, the acquisition debt, asset managers must ensure that the necessary movement of capital is achieved. Otherwise, considering and implementing ESG provides the macroeconomic opportunity that their businesses enjoy favorable conditions and consequently economic growth. But, ignoring ESG also bears microeconomic risks, as it includes regulatory and operational challenges that can have a financial impact across companies, industries, and countries, like damages in relation to environmental contamination, discrimination or any kinds of fraud. With sustainable business practices, products and services, these risks can be mitigated, and even new investment opportunities be found, such as new technologies.

⁶² Porter M., Kramer M. (2006)

⁶³ Bocquet R., Mothe C. (2011)

⁶⁴ Saeidi S., Sofian S., Saeidi P., Saeidi S. (2015)

⁶⁵ Siltaoja M. (2006)

⁶⁶ Rindova V., Pollock T., Hayward M. (2006)

Reputation or reputational risk and its management can also concern the taxes an alternative manager and their funds need to pay, which can potentially be challenged by tax authorities. In the past even more than today, alternative asset managers have been blamed for aggressive tax management in relation to their own liabilities but also of the ones of their portfolio companies⁶⁷. If this is the case or even penalties need to be paid, a company runs the risk that one or the other investor might not invest in the next product, the next fund of the manager but in the one of competitors. This scenario is not totally unlikely considering the stories of LuxLeaks, Panama Papers, and Paradise Papers, just to name a few. A large part of the commitments comes from investors for which also their own reputation is important, which could be damaged if it would become public that they invest into a product that is not tax compliant, for example any national or governmental agency, state owned pension schemes or sovereign wealth funds. It is not comprehensible if a state is asking its people to be tax compliant if itself would directly or indirectly invest in products that are not. Just pension funds alone account for 31% of the capital invested in European PE funds in 2018⁶⁸. For asset managers it is a thin line between favorable tax planning, which is indeed in the best interest of investors, and aggressive tax planning, tax avoidance and tax evasion. While tax evasion is illegal, aggressive tax planning and tax avoidance are not, but a clear distinction is hard to assess. The OECD created the term “*spirit of the tax law*” and in a commentary to taxation explained that “*transactions should not be structured in a way that will have tax results that are inconsistent with the underlying economic consequences of the transaction unless there exists specific legislation designed to give that result*”⁶⁹. It is therefore questionable if alternative funds shall still be domiciled in offshore jurisdiction or in tax havens.

In his stakeholder theory, Freeman also argues that CSR can lead to better performance by protecting and enhancing reputation⁷⁰. And indeed, by transforming sustainability and responsibility into business behavior creates opportunities for value for society and companies, and the more it is integrated the greater are the chances to receive the benefits⁷¹.

⁶⁷ Badertscher B., Katz S., Olhoft Rego S. (2009)

⁶⁸ <https://www.investeurope.eu/research/data-and-insight/>

⁶⁹ <https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0144>

⁷⁰ Freeman E. (2010)

⁷¹ Porter M., Kramer M. (2006)

Evidence was already found that ESG activities can increase a firm's reputation and strengthen its interaction with several stakeholders⁷². In fact, plenty of prior research shows that reputation positively influences investors⁷³, corporate partners⁷⁴, employees and customers⁷⁵ as well as mergers and acquisitions value creation⁷⁶. And moreover, good reputation provides a further significant advantage to PE and other alternative asset managers, as one of the main goals of every one of them that launched a fund is to set up the next one, the successor, in order to stay in business, which usually takes place if the current fund is 75-80% invested. In addition to superior financial returns for investors, first-class reputation makes it possible, as this complements a good track record.

For that ESG risk management is crucial. Direct operational risk can come from any kind of pollution, accidents, spills, strikes, and health or safety issues. But they can also result from products in case of defaults, recalls, and boycotts or from the supply chain in the event of inadequate use of resources or child labor. They can be disclosed by consumers, activists or media. And once done, if the risk management did not work, and the reputation has been damaged, it can have a direct impact on the financial performance of a company. As firms get bigger or more prosperous, reputational risks become more costly, and ESG can be a means of reducing risk and on the other hand even a means of increasing reputation. It can therefore be inferred that there is a clear interaction between risk management, reputation, and financial performance. And to conclude, premier reputation is therefore so valuable, because it tells customers which product to buy, what company one would like to work for, and in what assets it should be worthwhile to invest. Furthermore, the researched case at hand is even twofold. It is not only about risk management and the good reputation of the investments, the portfolio companies, but also about the good standing of the investors and of the asset manager. All can be positively affected, and reputation marketing can pay off as well, as a positive image and as a differentiator, reducing competition and increasing investor preference. PE and other alternative manager are increasingly making use of it⁷⁷.

⁷² Branco M., Rodrigues L. (2006)

⁷³ Pfarrer M., Pollock T., Rindova V. (2010)

⁷⁴ Dollinger M., Golden P., Saxton T. (1997)

⁷⁵ Turban D., Cable D. (2003)

⁷⁶ Chalencon L., Colovic A., Lamotte O., Mayrhofer U. (2017)

⁷⁷ <https://www.forbes.com/sites/brucerogers/2013/05/23/there-is-money-in-reputation-private-equity-money/>

1.6. PE and Other Asset Classes, Their Impact, and Performance

Over the years, most PE and other alternative asset class managers have brought creating value for their portfolio companies they buy to perfection, but it is not only about reducing costs, upgrading talent, financial engineering and in general value creation. It is also the access to the brain trust of the managers and their extensive network they maintain to all kinds of industrial advisors. Each fund has a particular investment focus in order to appeal certain investors with different objectives. However, most asset managers and their investments, the portfolio companies, are mainly private companies, which is why not much information is publicly available, and that is why they were able to escape the scrutiny of public firms.

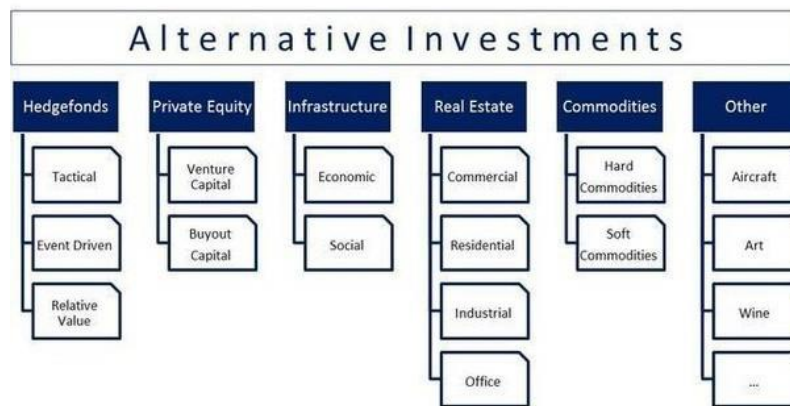
1.6.1. The Different Asset Classes, Structures and Organizations

The aim of the industry is to build bigger, better and stronger and more profitable companies through long-term value creation, but in order to answer the research question what the industry has accomplished so far, an understanding of the alternative sector must be established. The term alternative investment is relatively loose and is not finally defined. In practice, alternative investments are nowadays also called private capital or private markets. In general, it is risk capital for investment in assets other than the traditional investment types like stocks, cash, and bonds, and it has different forms. PE provides equity risk capital outside the public markets, which is made available by financial investors over the medium or long term, in general to non-quoted and mature companies with high growth potential, in which the PE firms normally acquire a controlling stake⁷⁸, which enables them to exert influence on the management of their portfolio companies, and usually they even take seats on the board of directors. When a PE investor makes an investment, it usually uses bank debt or other debt capital raised to meet a certain part of the capital required to fund the acquisition. This debt is called ‘leverage’ and the transaction ‘leveraged buyouts’, and amongst others this strategy differs from Venture Capital or growth capital (VC), which in general do not use debt for their acquisitions. VC is focused on start-up’s, early-stage investments and emerging companies.

⁷⁸ Harris R., Jenkinson T., Kaplan S. (2014)

In the past, they financed famous companies like Amazon, Apple, Airbnb, eBay, Facebook, Google, Spotify, Starbucks, or UBER, mainly technology driven entities, in which a minority holding is acquired and that have a high growth potential or have already demonstrated growth⁷⁹.

Figure 10: Alternative Investments⁸⁰



Another alternative asset class is Real Estate (RE), which is considered as acquisitions of commercial, office, industrial or residential property via three different investment approaches, core, value-add, and opportunistic. All three define the risk and return characteristics⁸¹. Core property usually requires very little asset management and is located in prime markets, while a value-add property has either occupancy issues, improvements needs, deferred maintenance or a combination of all three, and opportunistic property requires from the ground up development or repositioning. Other alternative asset classes are Infrastructure (Infra), which is understood as investments in economic sectors like energy, transport and logistics, environmental, telecom and social sectors⁸², and Private Debt (PD) or Private Credit, which is the provision of capital for other alternative transactions, direct lending as senior loans, distressed debt, mezzanine capital, special situations like management shareholding restructurings or buy-outs and financing consolidations, recapitalizations, loans and bonds issued by other companies⁸³.

⁷⁹ Breznitz D., Forman C., Wen W. (2018)

⁸⁰ <https://bvai.de/en/alternative-investments/what-are-alternative-investments.html>

⁸¹ Fischer L., Hartzell D. (2015)

⁸² <https://www.infrastructureinvestor.com/rise-infrastructure-private-equity/>

⁸³ <https://www.unpri.org/private-debt/an-overview-of-private-debt/4057.article>

However, most alternative asset managers have their particular investment focus for a specific segment or region in order to attract dedicated investors. Further alternative asset classes are hedge funds, commodities or investments in for example art and wine, but all these differ substantially from the other investment approaches, are usually not a strategy of those asset managers who pursue PE, VC, RE, Infra, and PD investments and shall therefore not be part of this thesis.

PE and other alternative firms act as financial intermediaries between institutional investors and the companies the asset managers acquire. The funds that are invested belong to such institutional investors, and the vast majority of them does not have the time and, in particular, does not have the resources and skills to find the investments. The same applies to the monitoring of a portfolio of companies and the ability to add value.

And it is not a secret that the rapidly changing population in the developed world will cause insurance payments and, in particular, pension outflows to increase significantly and even exceed contributions made. Just the gap of US pension schemes between asset and liabilities was USD 3.8 trillion in 2017⁸⁴. The Baby Boomer generation has already started to retire in large numbers, and benefit plans will face negative cash flows. Insurance companies and pension funds, both large investors in PE and other alternative asset classes, will therefore struggle to meet their commitments when investing into the stock market and bonds only and hence, increase their funding to alternative asset managers. And the current low interest environment will contribute to that trend, too.

Alternative funds are usually set up as limited partnerships⁸⁵. The limited partners (LPs), to which the asset manager has a fiduciary duty of obtaining the best return⁸⁶, mainly institutional investors like pensions schemes, insurance companies, endowments, sovereign wealth funds, academic institutions, family offices, and high net worth individuals commit capital, expect a roughly promised return, and benefit from limited liability.

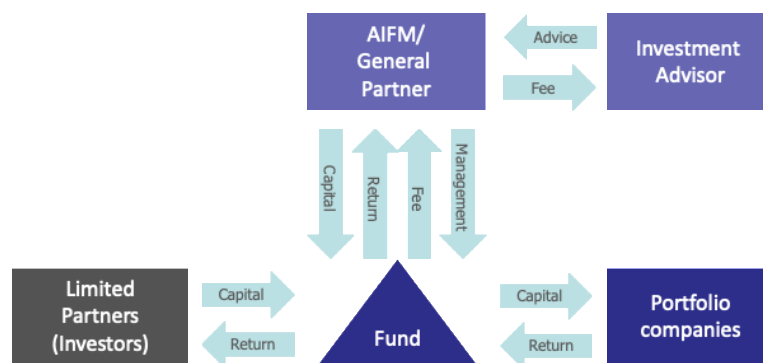
⁸⁴ <https://www.mckinsey.com/industries/private-equity-and-principal-investors/our-insights/mckinseys-private-markets-annual-review>

⁸⁵ Kaplan S., Strömberg P. (2009)

⁸⁶ Vega Vidal J., Fernandez Fernandez J. (2015)

An investment into an alternative fund is a long-term commitment of usually five to ten years, and as the funds are illiquid, investors cannot fully cash out before the fund is liquidated, or they seek to sell their commitment on the secondary market. The holding period of a portfolio company is several years, which is in any way longer than the holding period of stocks. The alternative fund as such is managed by a general partner (GP) and in Europe by an alternative investment fund manager (AIFM) that is supervised by a GP, and both typically belong to the alternative manager. The GP has unlimited liability. In exchange for the service provided, GP and / or AIFM receive a management fee usually between 0.5 to 2% of the fund size per annum that is mainly used to pay overhead costs and an advisory company that belongs to the manager, too. In order to align the interests of the asset manager and the LPs, the investment firm will also invest an amount of usually up to 5% of the total fund size, the skin in the game. And once a previous agreed return has been paid back to the investors, the alternative manager is also entitled to participate when investment proceeds flow back. This so-called carried interest can typically be up to 20% of the capital gains but is only paid if the fund generates a profit that exceeds a certain level, the hurdle rate. Consequently, it can be noted that the incentives at an alternative asset manager can be at a very high level, and the same counts for the management of the portfolio companies that not only is asked to invest their own money but also receives shares, warrants or other upside derivatives, which means that if they deliver as planned and have created the envisaged value, they can make a lot of money and if not lose it. As a consequence, the interest of investors, of the asset manager, and of the management of the portfolio companies is well aligned.

Chart 2: Fund Structure and Interaction



In general, PE and other alternative funds are set up as limited partnerships and are governed by the terms of a limited partnership agreement (“LPA”) that stipulates the authority and tasks of the GP and of the AIFM and the rights of the LPs. It specifies what and how business decisions are made, which amongst others include the capital contributions by the LPs, the allocation of costs and profits, resolve conflicts, the reporting to investors, and how the relationship is closed once the fund is liquidated.

The asset manager defines a specific investment goal and target for the fund, which is then stipulated in the private placement memorandum (PPM) or prospectus that is the offering document that discloses everything the LPs need to know for making a commitment. It details an overview of the asset manager and its operations including the key and main persons acting, the track record if available, a forecast of anticipated proceeds, the investment opportunities that it is seeking for, strategy and approach, tax implications, risks and regulatory disclosures, but also the investment process as such and how investment shall be made including the involvement of ESG matters. In fact, the PPM is the main fund document that enables investors to make an investment decision.

If an investor agrees to the offering, it signs a subscription agreement that is a summary of the PPM terms, which secures the capital of the LP. It is the contract between the LP and the asset manager that also outlines the amount of the commitment and provides certain representations and warranties that are to be given by the investor. A usual procedure nowadays is the use of so-called side letters between individual investors and the fund manager, which provide additional rights and obligations that were not part of the LPA or PPM and that can range in scope from administrative matters to granting substantive rights to investors. Side letters in general are only for the benefit of a LP. They can also include the consideration of ESG matters if they were not yet mentioned before or not to that extent.

An alternative fund does not build a large portfolio in accordance with modern portfolio theory. It typically first originates opportunities where negative or positive screening can already take place and then makes several investments in different diversified assets, and each does not exceed a certain percentage of the fund.

Usually being mentioned in the PPM, the attractiveness of an investment is considered in a due diligence (DD) process, a kind of investigation, review or audit, which is a comprehensive investment analysis that not only identifies the opportunities but also any areas that could be deemed to materially affect the success of the investment or mitigate risks. This can include amongst others financial, legal, tax, commercial, and customer DD but also ESG matters like again a negative or positive screening. But before making an investment a business plan is set up that includes a 100-day-plan that outlines what actions need to be implemented first, which is always tailored to the specific company, its sector, size, and region. The chosen strategy aims for creating value and a superior return for investors that can come through growth and improvements of any kind, such as the implementations of ESG matters. And already when a new investment is being evaluated, potential divestment or exit strategies are analyzed and are therefore part of the DD process, too. In general, alternative manager pursue three different kinds of exists, the trade sale when a portfolio company is sold to an industry peer or strategic competitor of such entity, a secondary sale or buyout in which case another alternative manager acquires the investment and is sold from one to another, and third the initial public offering (IPO) when the investment goes public and in most cases is listed on a stock exchange.

ESG matters become more and more important to attract investors, and institutional ones increasingly demand it⁸⁷. They themselves like public pension plans, universities, insurance companies, foundations, and endowments are facing the request to become more sustainable, incorporate ESG in their asset allocation and consequently will require from the companies they invest into to apply such standards, and alternative asset managers working as an agent for the LPs need to implement it. However, in the USA privately sponsored pension plans are governed by the Employee Retirement Income Security Act as of 1974, as amended, and interpreted and enforced by the US Department of Labor, which in its interpretive bulleting relating to the fiduciary standard under the act only allowed ESG considerations since October 26, 2015⁸⁸, because before it was forbidden to invest on any other criteria other than the highest return.

⁸⁷ Cumming D., Johan S. (2007)

⁸⁸ <https://www.federalregister.gov/documents/2015/10/26/2015-27146/interpretive-bulletin-relating-to-the-fiduciary-standard-under-erisa-in-considering-economically>

ESG matters may now be “used solely to evaluate the economic benefits of investments and identify economically superior investments”. But also, celebrities like actress Eva Longoria, former sportsmen like Andre Agassi and Magic Johnson⁸⁹ as well as wealthy private investors like high net worth individuals that often have pooled their wealth in so called family offices have a higher interest in sustainable investing⁹⁰. However, a perception of high volatility and financial losses were identified as barriers by previous research, but this might mainly concern investments in public markets that were made a while ago. The Global Family Office Report of major bank UBS as of 2019 analyzed 360 family offices worldwide and revealed that over 40% of their portfolio is invested in alternatives, 34% are now engaged in sustainable investing, 33% believe that it is not established enough, and that 85% of such investments met or exceeded expectations⁹¹. The insufficient reporting of sustainable investing that was found out by previous research is also addressed by other industry organizations. The Institutional Limited Partners Association that represents more than 500 LPs with an AUM of more than USD 2 trillion that invest in alternative investments has published its principles 3.0 in 2019, which mention what they expect in the future from the GPs and their funds they invest into⁹². Amongst others, they ask for increased ESG integration and, in particular, to maintain and constantly updating an ESG policy. With reference to the UN PRI, it shall be made clearer how ESG is factored in the DD process, and material ESG matters pertaining to portfolio companies, any risks and violations shall be reported.

However, PE and other alternative asset classes are relatively small organization in the number of people compared with the amount of assets they manage, and they are not only known for maximizing shareholder value by reducing costs but also apply financial engineering as capital restructuring and additional access to capital, operational enhancements like management replacements, strategy change or new business segments, and governance engineering as well as improved efficiency⁹³. It is therefore not immanent or obvious that such investors use practices to provide public good.

⁸⁹ <https://www.reuters.com/article/us-usa-wealth-athletes-idUSKBN16R0A9>

⁹⁰ Paetzold F., Busch T. (2014)

⁹¹ <https://www.ubs.com/global/en/wealth-management/uhnw/global-family-office-report/global-family-office-report-2019.html>

⁹² <https://ilpa.org/industry-guidelines/>

⁹³ Kaplan S., Strömberg P. (2009)

1.6.2. History of Alternative Assets and the Industry Today

Investors have bought companies at least since the industrial revolution, and in 1901 J. Pierpont Morgan acquired Carnegie Steel via debt financing for USD 480 million, which is therefore seen as the first true leveraged buyout transaction, as they are thought of today⁹⁴. The true private equity as we know it today then only emerged after the Second World War when in 1946 the first two VC firms were founded, J.H. Whitney and the American Research and Development Company, which in 1957 invested USD 70,000 in the Digital Equipment Corporation and then raised USD 38 million in 1970 when it was brought public⁹⁵.

During this time, such kind of investments were primarily done by wealthy individuals and families. The Rockefeller, Mellon and Harriman families and the investment bank S.G. Warburg & Co founded one of the first PE companies of the world as they are thought of today in 1968⁹⁶. Due to the suffering stock market in the 1970s and the Employee Retirement Income Security Act in the US in 1974 that caused pension schemes to halt investments in high-risk asset classes, the PE industry was held up⁹⁷.

But when such investments were then permitted again in 1978, with the Tax Act of 1981 that lowered the capital gains tax to 20%, the resurgence of the stock market in the 1980s, and high availability of bank debt, PE experienced strong growth, in particular, in the 1990s, which last until today⁹⁸, especially in the low interest environment we currently face, as leverage to finance transactions is very cheap.

And since some years, PD, originally focused on SMEs that were not attractive to banks, supplies to PE the leverage that has helped the industry to buy the businesses. After the last financial crisis, big PE houses expanded their PD operations, as banks were not able or willing to lend as in previous times also because of more heavy regulations. In addition, PD is often just faster than banks in providing the capital to finance the acquisitions.

⁹⁴ Poniocheck H. (2019)

⁹⁵ Cendrowski H., Petro L., Martin J. (2012)

⁹⁶ <http://www.aeainvestors.com/about-aea/>

⁹⁷ Cendrowski H., Petro L., Martin J. (2012)

⁹⁸ Ibidem

Infrastructure investments go back to the privatization boom in the 1980s when infrastructure providers as General Electric, Siemens or ABB raised funds for such kind of investments, and in the 1990s banks set up funds to invest in core infrastructure investments⁹⁹.

Later on, PE firms have then seen this as a further attractive asset class, as it is considered as less risky and volatile compared to PE or VC, and literally the same happened with RE, which in addition has the advantage of producing a constant income by a continuous revenue stream through rents.

With the increasing population and governments being not able or willing to invest in infrastructure and real estate, which are together called real assets, it is now an attractive asset class for alternative managers. In order to assess what the importance of PE and other alternative asset classes is, its impact on the business world need to be analyzed.

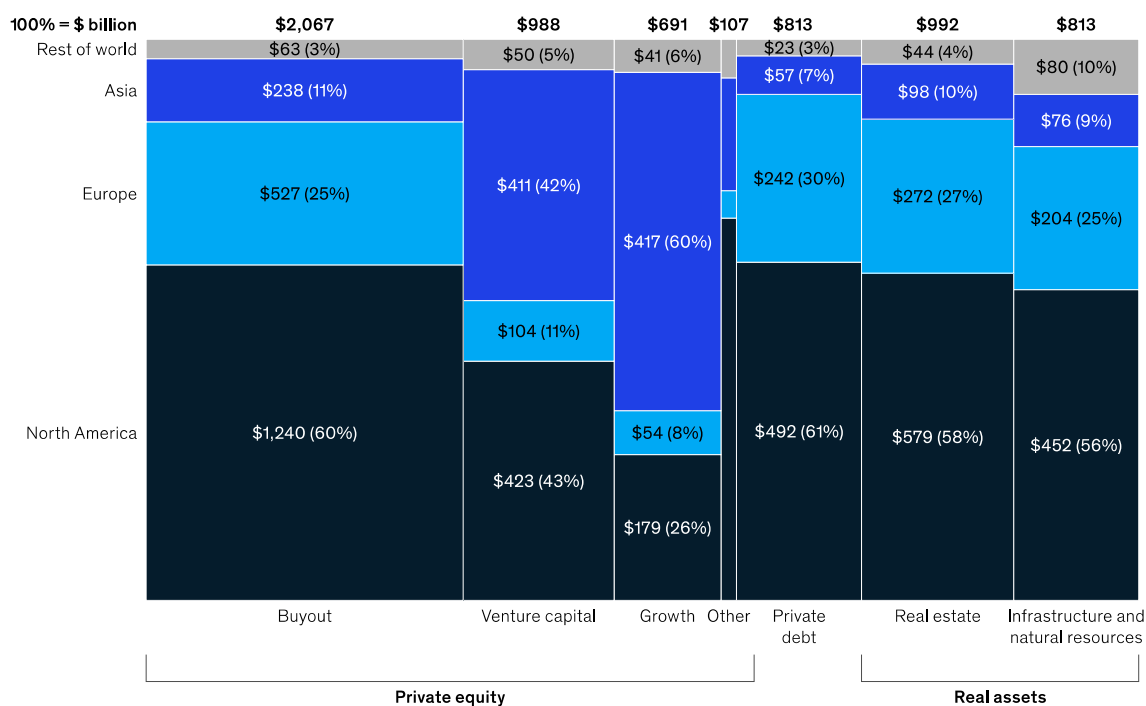
According to a 2020 report of the global management consulting firm McKinsey & Company the capital available for investments, which is called “dry powder”, by private market firms reached recently a new record high of USD 2.3 trillion¹⁰⁰. Since 2019, the AUM, which includes committed capital, dry powder, and asset appreciation, grew by 10%, and by USD 4 trillion in the last decade, which is an increase of 170%.

Just the number of PE firms has more than doubled, and the number of companies that were acquired by US asset managers has increased by 60%. In comparison, the AUM of the global public market only grew by 100%, and the number of US listed companies decreased by 40 since the year 2000. The total AUM across all alternative asset classes in 2019 stands at USD 6.47 trillion, as investors continue to shift capital from public asset classes. This shows the immense growth of the alternative industry in the recent years and how enormously power- and meaningful it is, which has a significant impact on the business world and potentially on society at large.

⁹⁹ <https://www.infrastructureinvestor.com/rise-infrastructure-private-equity/>

¹⁰⁰ <https://www.mckinsey.com/industries/private-equity-and-principal-investors/our-insights/mckinseys-private-markets-annual-review>

Figure 11: Private Markets AUM 2019¹⁰¹



The American Investment Council, as the advocacy organization of the private investment industry estimates that in 2018 industry owned companies employed around 9 million people throughout the US, that PE in the US is responsible for 5% of America’s GDP, and that it has a total impact of more than USD 1 trillion, considering its contribution to the production of final goods and services¹⁰². Invest Europe as the world’s largest association of private capital, says that PE has invested EUR 300 billion in European companies between 2014 and 2018, that more than 24,000 companies in Europe have received funding from PE of which more than 80% are SMEs, and that it currently employs around 8 million people¹⁰³. SMEs, in particular, nowadays require third party funding, as traditional financing sources are either not available or reluctant to provide it, and alternative managers also provide prospects to family-owned businesses when traditional succession plans are not available. And on top, they manage to grow large companies even further.

¹⁰¹ <https://www.mckinsey.com/industries/private-equity-and-principal-investors/our-insights/mckinseys-private-markets-annual-review>

¹⁰² <https://www.investmentcouncil.org/private-equity-at-work/>

¹⁰³ <https://www.investeurope.eu/about-private-equity/private-equity-impact/>

All that is the reason why Tim Jenkinson, professor at Saïd Business School at Oxford University calls them “*the new kings of capitalism*”¹⁰⁴. It is also obvious that most of the world’s companies are not listed on stock markets. They are funded privately through for example PE, PD, micro financing and grants. Sustainable alternative investments could therefore be seen as even more important, because public equity impacts less and does not provide working capital. The significant influence of PE and other alternative asset classes is also caused by the level such firms can exercise control due to the active ownership by exerting influence on the management of the companies they acquire.

1.6.3. Economic Impact, Jobs, Productivity, and Performance

Although the alternative industry has been a subject of considerable controversy, like failed investments, asset stripping and asset flipping, it can provide important economic and social benefits. PE portfolio companies are more active in research and development and file more patents¹⁰⁵. PE transactions have resulted in significant increases in real performance or productivity¹⁰⁶ and positive effects as well as rise in employment and wages have been noticed for leveraged management buyouts over the 1980 to 2005 period in the US analyzing 3,200 firms¹⁰⁷. The same was found for the UK market for the years 1999 to 2004 investigating 1,350 firms¹⁰⁸ and for French companies for which 839 deals were researched, and the firms also became more profitable and grew much faster than their peer group¹⁰⁹. The most recent study that examined 9,800 US PE deals from 1980 to 2013, including two financial crises, revealed that employment increases of privately held firms by 13% and by 10% when a PE company made an acquisition from another PE fund, and in addition productivity raised by 8%, which confirms that PE backed businesses can become more efficient and that their sponsors add value and improve companies over the long-term¹¹⁰. Although it is not to be concealed that sometimes the acquired companies are so much inflated and bear such a high cost burden for employees, in general job creation and also productivity increase does not come by surprise.

¹⁰⁴ <https://www.thetimes.co.uk/article/best-of-the-mba-private-equity-the-new-kings-of-capitalism-rbktl9z0cn3>

¹⁰⁵ Sorensen M., Strömberg P., Lerner J. (2011)

¹⁰⁶ Harris R., Siegel D., Wright M. (2005)

¹⁰⁷ Davis S., Haltiwanger R., Lerner J., Miranda J. (2011)

¹⁰⁸ Amess K., Wright M. (2007)

¹⁰⁹ Boucly Q., Sraer D., Thesmar D. (2011)

¹¹⁰ Davis S., Haltiwanger J., Handley K., Jarmin R., Lerner J., Miranda J. (2014)

Alternative asset managers and PE and also VC, in particular, look for companies with growth potential. Only very few performance gains would not attract them. And even in case of secondary transactions, the sellers would always intent to leave some or enough potential on the table so that the next owner can still grow the firm. Asset sales of a recently acquired firm might at first seem to reduce the size of the operations compared to what it was before, but the exit of low performing assets can increase the performance of the remaining business. Narrowing of the strategic focus of a company or restructuring by selling or leasing back assets or outsourcing processes has for sure the ability to create value¹¹¹. Companies that are backed by PE sponsors that in general have deep pockets to foster their portfolio even have a positive impact on their peers. Productivity, employment, and capital expenditure increases in the same country and industry especially when competition is high, which is a side effect how the industry can create additional value.

Whilst the performance of mutual stock funds is relatively easy to measure and to compare according to certain comparable indices, most of the alternative firms are not listed and only disclose very few numbers to the public, if any. The few that are listed are amongst others four of the ten biggest players, The Carlyle Group, Blackstone Group, Kohlberg Kravis Roberts and Apollo Global Management, which have total AUM of around USD 1.3 trillion, circa 20% of the global AUM. Such firms, all headquartered in the USA, are obliged to release data according to the rules of the prudential supervisory authority, the US Securities and Exchange Commission.

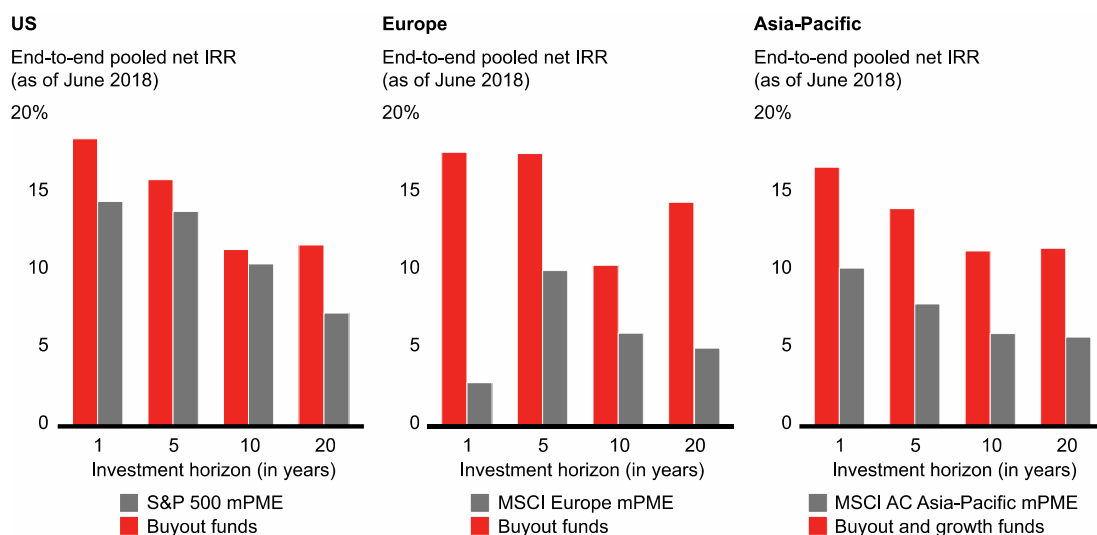
Hence, only PE houses representing around fifth of the global AUM are bound by advanced disclosure obligations. However, the investments of the entire industry are measurable even when not public. Market shares and enterprise values are often known, in particular, when it comes to an exit of an investment. Compared with previous figures, some insight is available from analysis of private equity case studies. According to a report of global management consulting firm Bain & Company, PE funds have steadier and more reliable returns and outperform public equities in all major regions, in the short and long term¹¹².

¹¹¹ Wright M., Hoskissen R., Busenitz L. (2001)

¹¹² <https://www.bain.com/insights/topics/global-private-equity-report/>

By means of the public market equivalent metric, which simulates the timing and size of PE cashflow if it would have been invested in public equities, one can compare both kinds of investments using the end-to-end pooled net internal rate of return.

Figure 12: Private Equity Returns in Major Regions¹¹³



And over the last 30 years, the S&P 500 provided a net return of 8.1% while US buyout funds generated 13.1%, and the gap in Europe and in the Asia-Pacific region is even bigger. The better returns over the years and regions are further evidenced by the total value paid-in, which can also be referred to as gross multiple, net multiple, or multiple of investment cost. It is calculated by dividing the cumulative distributions and residual value by the paid-in capital and provides insight into the performance by showing the total value as a multiple of its costs. The difference to the top quartile PE firms in the US and Europe is even larger.

Studies of leveraged buyout transactions in the UK found the same results¹¹⁴ and PE transactions from 1984 to 2004 also provided a positive and significant evidence of superior returns¹¹⁵. The buyout and growth equity index of Cambridge Associates as of Q4 2018 found that all major indices were outperformed on any period from 1 to 25 years¹¹⁶.

¹¹³ <https://www.bain.com/insights/topics/global-private-equity-report/>

¹¹⁴ Nikoskelainen E., Wright M. (2007)

¹¹⁵ Cumming D., Walz U. (2010)

¹¹⁶ <https://www.cambridgeassociates.com/private-investment-benchmarks/>

A recent research of nearly 1,400 PE and VC funds investigated a performance that consistently has exceeded public markets like the S&P 500 between 20 to 27 % over a fund's life and more than 3% annually¹¹⁷. Of course, PE has recently benefitted from low interest rates and the use of credit lines, which pushed back the timing of investment for investors. But furthermore, favorable credit markets providing capital to target companies also enabled the payment of dividends for asset managers to cash out early in the deal life cycle, which causes 90% of the LPs to state that PE investments met or exceeded their expectations in the recent years. Consequently, almost every second LP intends to increase its allocation to the industry. Hence, private markets capital has grown more than three times as much as public capital over the last 20 years.

1.7. ESG and Financial Performance

PE and other alternative asset classes are above all investment funds, which raise capital from wealthy institutional investors, like pension plans, universities, insurance companies, foundations, endowments, family offices, and high net worth individuals. And a lot of individuals are even indirectly linked to the alternative industry via their connection to such pension schemes and insurance companies, in particular. But each of these investors has its own set of goals, preferences and investment strategies. All asset managers provide capital to target companies to enable, growth, expansion, new product development, or restructuring of the company's operations. But even if LPs have a long-term investment horizon or payout obligations and are therefore interested in the long-term sustainability of their investments, finally they are like any other investor. They want a good and competitive financial return on their investments.

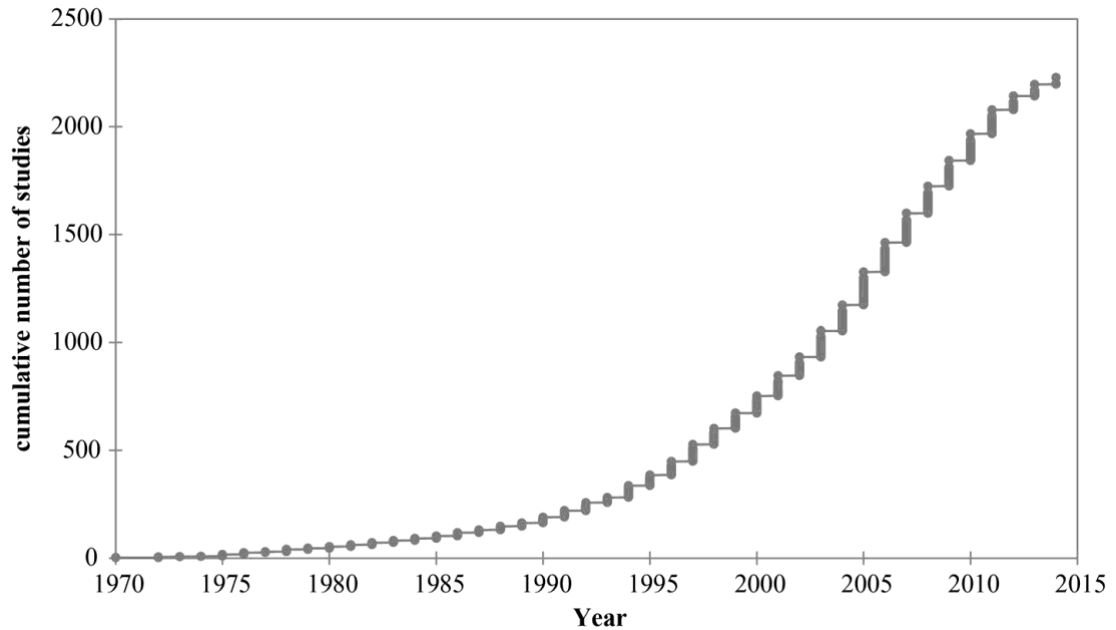
The impact of sustainability, responsibility, CSR, SRI or ESG on financial performance has been studied extensively in academic literature¹¹⁸. The academic interest but also the concerns of the business world reveals in many studies and analysis addressing sustainability and responsibility as well as ESG, in particular. Since many years, investors and analyst have discussed if ESG factors can lead to better financial returns. At least, it is about understanding the link or if there is any interrelation between ESG and corporate financial performance ("CFP").

¹¹⁷ Harris R., Jenkinson T., Kaplan S. (2014)

¹¹⁸ Humphrey J., Lee D., Shen Y. (2012)

Some theoretical insights and empirical findings have been disclosed during that process. It is estimated that since the 1970s more than 2,000 studies have been published.

Figure 13: Estimated Number of Empirical Studies on ESG-CFP¹¹⁹



But the causal context was not always totally clear. Different theories predict conflicting results and some empirical studies have found inconsistent outcomes:

- Criticism prevails that ESG does not support fundamental analysis, restricts investment decisions, and runs contrary to tenets of modern portfolio theory.
- Supporters argue that markets do not efficiently price ESG factors, because they address long-term risks that have not been imbibed by such economies, and that markets begin to recognize the undervalued influence of the alpha generation.

Academic studies and industry analysts have supported both sides, although altogether they conclude that investors employing ESG factors do not face a performance loss, that investors can achieve comparable risk-adjusted returns compared to non-ESG strategies, and that investors may be able to enhance their returns through the use of certain ESG strategies. It was found out that SRI in mutual funds does not mean that returns need to be sacrificed.

¹¹⁹ Friede G., Busch T., Bassen A. (2015)

In a meta-analysis of 167 studies conducted in 2009, the conclusion is that the overall interdependency between ESG and CFP, more precisely the coefficient of ESG in the regression measures of CFP, is positive¹²⁰.

In October 2007, a report issued by the United Nations Environment Program Finance Initiative analyzed 20 academic works and 10 key broker studies about the links between different approaches to responsible investment and investment performance¹²¹. It was found that ESG investment strategies are competitive with non-ESG strategies.

Consulting firm Mercer analyzed 16 studies that were conducted between the years 1984 to 2007, and only two of them showed neutral to negative results, four a neutral one, and 10 studies a positive result that ESG could lead to superior returns ¹²². Another study in the year 2010 found out that ESG matters have positively affected the long-term growth of firms more than any other economic variables¹²³.

A working paper of the Harvard Business School in 2011 investigated the effect of sustainability on corporate behavior and performance outcomes. 180 companies have been analyzed and tracked over a period of 18 years and compared with benchmarks like the Thompson Reuters ASSET4 database and previous academic meta-analysis¹²⁴.

It was found that sustainable companies significantly outperform their competitors over the long-term, both in terms of stock market and accounting performance, such as return-on-assets or return-on-equity and exhibit lower volatility. However, none of these firms are PE or other alternative asset managers or their portfolio companies. It is therefore also of academic interest what the alternative industry has achieved so far in relation to ESG. And it was further revealed that there is a positive relationship between good ESG compliance in relation to the material impacts of an investment object and its economic performance.

¹²⁰ Margolis J., Elfenbein H., Walsh J. (2009)

¹²¹ <https://www.unepfi.org/publications/investment-publications/demystifying-responsible-investment-performance/>

¹²² <https://www.mercer.com/our-thinking/wealth/responsible-investment.html>

¹²³ Rubaltelli E., Pasini G., Rumiati R., Olsen R., Slovic P. (2010)

¹²⁴ Eccles R., Ioannou I., Serafeim G. (2011)

A 2012 meta-analysis by Deutsche Bank Climate Change Advisors of more than 100 academic studies, revealed that incorporating environmental, social and governance data in investment analysis is “*correlated with superior risk-adjusted returns at a securities level*”¹²⁵, which was further evidenced by another meta-analysis of the asset and wealth management division by Deutsche Bank in 2015 together with the University of Hamburg that found out that 63% of all studies revealed a positive correlation between ESG and returns, and only 8% saw a negative effect¹²⁶.

Another study found out that companies that perform well on a material sustainability matters outperform those with a poor performance, however, firms with a good performance on sustainability issues that are not material even do not underperform those with poor performance, which shows that investments in sustainability issues are at least not harming value creation¹²⁷.

The most recent and currently most cited study on the relation between ESG and CFP was conducted in 2015 and extracted all primary and secondary data of previous analysis of working papers, journals and commercial articles and combined about 2,200 individual studies¹²⁸. Around 90% revealed that ESG does not harm CFP, and even the vast majority indicated positive findings.

Furthermore, the positive impact appeared stable over time since the mid-1990s. The study on the one hand side examined vote-count studies that count the number of analysis that either “voted” positive, negative, or inconsiderable. In addition, all available meta-analysis were researched. The results show that 47.9% of the vote-count studies and 62.6% of the meta-analysis found a positive link with an average correlation level between 0.146 and 0.150, and in total around 90% an insignificant relation between ESG and CFP.

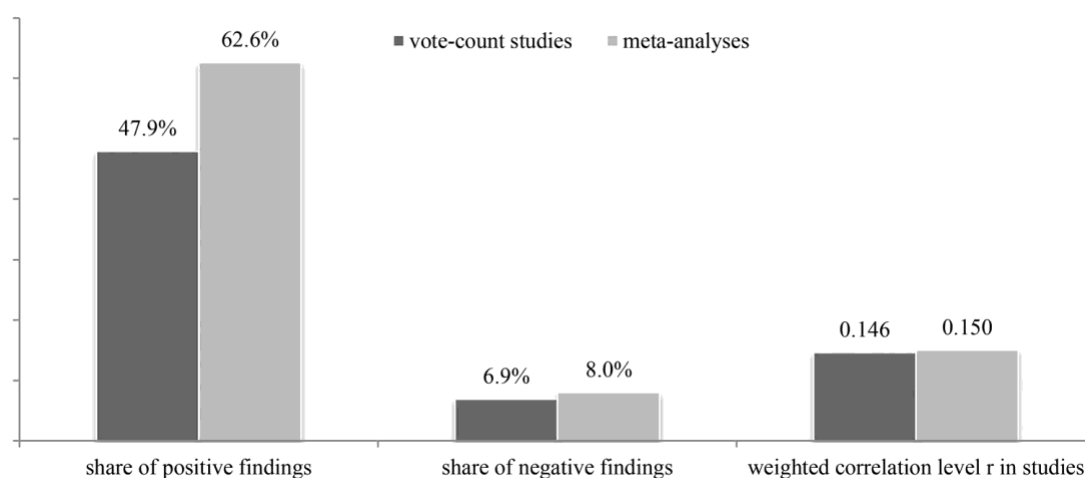
¹²⁵ https://www.db.com/cr/de/docs/Sustainable_Investing_2012.pdf

¹²⁶ https://www.db.com/newsroom_news/2016/ghp/esg-and-financial-performance-aggregated-evidence-from-more-than-200-empirical-studies-en-11363.htm

¹²⁷ Kahn M., George S., Aaron Y. (2015)

¹²⁸ Friede G., Busch T., Bassen A. (2015)

Figure 14: Overall Summary Results on ESG-CFP¹²⁹



The analysis also surveyed different regions and found out that all portfolio studies show a positive effect of 51.5% for North America, 45.6% for Europe, for the entire developed world of 49.8% and for emerging markets even 70.8%. The most interesting finding is, considering that the vote-count studies and meta-analysis included results for equities as well bonds and RE, that for RE as one of the alternative asset classes 71.4% of all studies showed a significant positive correlation between ESG and CFP, although the sample was with seven analysis, five positive and two neutral, rather small.

Analyzing 2,454 PE deals of 51 fund managers across 220 funds over 20 years in Europe and North America, it was recently found out by HEC Paris that gender diversity even could increase returns, as diverse teams deliver a 12% higher internal rate of return¹³⁰. However, the alternative industry is still a men's world. For example, women in PE are still the exemption rather than the rule. In average, only 18% of the workforce are female, most of them are working in the back-office or lower levels and are not equally promoted as men¹³¹. Females on senior executive level are only represented by 9.4%, although the risk of failed investments is lower than for all-male teams, and the average capital loss ratio is only 8%¹³². Diversity in every form whatsoever, gender, ethnicity, and nationality increases efficiency, and this is only one angle of ESG.

¹²⁹ Friede G., Busch T., Bassen A. (2015)

¹³⁰ <https://www.wsj.com/articles/gender-diversity-could-be-a-source-of-higher-returns-for-private-equity-11561156244>

¹³¹ <https://www.mckinsey.com/industries/private-equity-and-principal-investors/our-insights/mckinseys-private-markets-annual-review>

¹³² <https://www.ft.com/content/136e07f4-103b-11ea-a225-db2f231cfeae>

However, there is a lack of standardization what ESG definitely is or shall be for the alternative industry. The fact that ESG can be implemented through several strategies and even combined does not facilitate the process. Definitions vary greatly, and the concept is highly influenced by cultures, and a common definition of sustainable and responsible or ESG investing is hard to set up. Although, most recent studies revealed that it is the case, one could argue that even if ESG would not positively affect financial performance or at least does not harm it, society and the world we live in do not provide another choice. Environmental harm, social discrimination, and bad corporate governance just do not work anymore in the 21st century.

1.8. ESG and Legal Provisions

Although thousands of individual environmental or social protection regulations exist around the world, like for example for certain industries of portfolio companies that are exposed to the environment, public firms, investors like public pension schemes, and listed alternative asset managers. But the latter is the large exemption. There are almost no regulations in relation to investment components for private financial institutions. What role investors shall play and how is not yet articulated for the entire industry. Just since recently, there are signs that it is beginning to change.

In accordance with provision two of the Occupational Pension Schemes (Investment) Regulations Act 2005 all UK pension funds must possess investment principles that have social, environmental or ethical considerations taken into account in the selection, retention and realization of investments¹³³. In 2010, the mandatory CRC Energy Efficiency Scheme was introduced in the UK, which shall reduce carbon emissions of energy-intensive public and private sector organizations¹³⁴. In October 2019, the UK government issued the Environmental Bill, which aims to improve air and water quality, to reduce pollution, and to protect plants and wildlife¹³⁵. The German parliament passed the Climate Protection Act on 15 November 2019 to implement the Climate Protection Program for 2030 that includes several industry sectors with the aim to reduce greenhouse gas emissions by 55%¹³⁶.

¹³³ <http://www.legislation.gov.uk/ukxi/2005/3378/regulation/2/made>

¹³⁴ <https://www.gov.uk/government/collections/crc-energy-efficiency-scheme>

¹³⁵ https://publications.parliament.uk/pa/bills/cbill/2019-2019/0003/cbill_2019-20200003_en_2.htm

¹³⁶ <https://www.bundesregierung.de/breg-en/issues/climate-action>

With its interpretive bulleting relating to the fiduciary standard under the Employee Retirement Income Security Act as of 1974, as amended, and interpreted and enforced by the US Department of Labor¹³⁷, ESG matters may be “used solely to evaluate the economic benefits of investments and identify economically superior investments”.

France’s Energy Transition Law as of 2015 sets out an action plan for becoming a low-carbon economy, including a requirement for institutional investors to disclose how they are contributing to national carbon targets¹³⁸. In August 2016, China launched the Guidelines on Establishing the Green Financial System that shall accomplish a green finance system as a national strategy¹³⁹.

However, all such laws and regulations do not directly concern the financial industry or PE and other alternative asset classes as such. They only address potential portfolio companies for example via corporate disclosure regulations or investors like public pension schemes. But, the objectives of the 2015 United Nations Climate Change Conference in Paris and of the SDGs are slowly leading to laws and regulations, like the Climate Change and Green Finance initiative of the Financial Conduct Authority in the UK, that also supervises regulated alternative funds and asset managers, but consultations are still ongoing¹⁴⁰.

On March 8, 2018, the EU released its action plan for a greener and cleaner economy to develop a sustainable finance strategy for European capital markets, which provides a roadmap for the financial sector of upcoming key actions such as harmonizing the language for sustainable finance across the EU, creating standards for green financial products, clarification of institutional investors and asset managers’ duties to consider ESG matters in their investment decision process, incorporating of sustainability in prudential requirements, and strengthening of sustainability disclosure and improving accounting reporting standards.¹⁴¹

¹³⁷ <https://www.federalregister.gov/documents/2015/10/26/2015-27146/interpretive-bulletin-relating-to-the-fiduciary-standard-under-erisa-in-considering-economically>

¹³⁸ <https://www.gouvernement.fr/en/energy-transition>

¹³⁹ <http://unepinquiry.org/publication/establishing-chinas-green-financial-system-progress-report/>

¹⁴⁰ <https://www.fca.org.uk/publications/feedback-statements/fs19-6-climate-change-and-green-finance>

¹⁴¹ http://europa.eu/rapid/press-release_IP-18-1404_en.htm

Then, in March 2019 a regulation reached agreement and enforced disclosure regulations¹⁴², which were subsequently absorbed by the European Green Deal in January 2020¹⁴³. Amongst others, regulated alternative funds and AIFMs shall disclose publicly how they integrate ESG risks in their processes and ensure that investors be made aware of how ESG risks can affect their investments as well as the performance of sustainability focused investments. Therefore, as from June 30, 2021 information shall be published and kept up to date on websites including reference to any policies that implement such risks in their processes or principal adverse impacts on investment decisions. Sustainability related risks shall be disclosed in the PPM, and ongoing reporting to investors about the integration and the impact on returns be made. Details concerning the exact content, methodology and how the matters shall be presented are still to be set out in technical standards yet to be released, but it is already foreseen that a common ESG standard will not be provided. However, the obligations only apply to “*financial market participants exceeding on their balance sheet dates the criterion of the average number of 500 employees during the financial year*”¹⁴⁴, which is in fact a number that is only exceeded by very few asset managers, the biggest ones. The smaller firms can just opt out and explain why. Furthermore, performance measurement of sustainability focused investments only applies to those products that are specifically focused on sustainability like impact funds. Normal alternative funds that just have implemented ESG even on all levels are not covered. In addition, the regulation of course only applies to managers that distribute their funds on the European market and hence excludes any products that only seek for investors on the biggest alternative market of the world, the USA. And the US Congress already rejected the European reporting standard¹⁴⁵.

The G20 has launched another initiative via the Financial Stability Board’s Task Force on Climate-Related Financial Disclosures and several other countries have issued frameworks and guidelines, but most regulations and policies are voluntary or do not fully bind the alternative industry, and therefore fail to send a strong signal, have unclear objectives, or they are not specific enough to provide accountability for stakeholders.

¹⁴² https://ec.europa.eu/commission/presscorner/detail/en/IP_19_1571

¹⁴³ https://ec.europa.eu/info/publications/200114-european-green-deal-investment-plan_de

¹⁴⁴ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R2088&rid=1>

¹⁴⁵ <https://www.ft.com/content/0dd92570-a47b-11e9-974c-ad1c6ab5efd1>

It is therefore to be seen when and how far the European Commission will go when it comes to issue laws and regulations. Considering how the alternative industry is so far really affected reveals that proposals are principle based rather than prescriptive, as ESG regulation is still in its infancy due to the fact that a common definition and how the implementation shall exactly look like is not agreed, yet.

1.9. The Status Quo

It has been shown that all generations but, in particular, the younger ones have a growing demand for more sustainability and responsibility of business, which includes the financial industry and the alternative one, in particular. Some sectors already address the ESG matters, and the world of finance bands together with the UN PRI as the leading framework and guidelines for sustainable finance. The advantages of ESG are clear. Innovation can be fostered, risks mitigated, reputation enhanced, and overall value can be created. However, the extent and depth of the integration of ESG is not yet known, as the industry has no common standard they could abide to. And it is not yet a legal requirement for alternative industry to incorporate ESG into their business model. IN addition, what counts to a certain degree for the disclosure of financial performance is also valid in relation to ESG and its integration. PE firms are not obliged to report about it to the public. And so far, PE and other alternative asset managers have not been researched what they are really doing or implementing or what their approach is. The purpose of the research is therefore to investigate in detail what PE and other alternative asset classes have accomplished so far. Some people argue that companies' promoting their ESG efforts is just marketing or green washing. It shall therefore be researched what has been done and achieved by the PE industry and other alternative asset managers. With that, more insight can be gained how the powerful alternative industry contributes to important maximization of all stakeholders. As this thesis aims to present what PE and other alternative asset classes have accomplished so far regarding ESG matters, the remainder of the paper will at first provide a literature and research review that will analyze previous studies on the subject at hand. Subsequently, the methodology used will be presented followed by the data and findings. Afterwards, it will be discussed what results have been found, what limitations exist, and what future research might find. Recommendations will be given thereafter followed by the conclusion.

2. Literature Review and Research

Maybe the most well-known, not less provoking, and heavily discussed thoughts about social responsibility in business, although it was not an academic paper, were expressed in an article published by the New York Times on September 13, 1970¹⁴⁶. The author was Milton Friedman, who is seen together with John Maynard Keynes as the most important economist of the 20th century, and in 1976 he received the Nobel Prize in Economics. Although he acknowledged that an important employer in its own community can make certain efforts for example to attract employees and therefore decent salaries might be paid as risks like pilferage and sabotages can be avoided, he stated that those who believe that “*business has a social conscience and takes seriously its responsibilities for providing employment, elimination discrimination, avoiding pollution*” are “*preaching pure and unadulterated socialism*”, as “*only people can have responsibilities*” and only individuals can therefore do good, and consequently the article ends with the famous Friedman doctrine that “*there is only one and only social responsibility of business – to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception of fraud*”.

Afterwards, generations of academics and, in particular, economists have debated the doctrine and numerous if not countless articles are available. Some agree and other dissent vehemently. Famous criticism is expressed by Joseph Stiglitz, professor at Columbia University and Nobel Prize in Economics laureate in 2001 who just recently at the World Economic Forum in January 2020 stated again that just shareholder capitalism as Friedman advocated for “*led directly to the crisis we face today*”, because it does not maximize societal welfare¹⁴⁷. In addition, Friedman’s concept of agency that manager’s main obligation is to meet shareholder’s demand can be criticized, as agency has too many times been the excuse for questionable moral and ethical practices, irrespective if they were legal. Friedman seeks for and praises the free market in which social responsibility in business does not have a place.

¹⁴⁶ <https://www.nytimes.com/1970/09/13/archives/a-friedman-doctrine-the-social-responsibility-of-business-is-to.html>

¹⁴⁷ <https://www.weforum.org/agenda/2020/02/davos-outcomes-economic-changes-progress/>

But bad corporate governance and the scandals that have emerged out of it, actually have led to the intervention of the legislator. The cases of Enron and WorldCom for example caused the Sarbanes Oxley Act of 2002, which introduced an accounting reform and investor protection act in the USA. And the same happened not only in the USA in relation to pollution, inequality and tax avoidance. However, this dispute does not need to be resolved, as most recent studies revealed that social responsibility in business, ESG, at least does not harm corporate financial performance or even more that it positively affects it. Since then, academia has acknowledged the need for sustainability and responsibility in business, and numerous articles and studies do exist that investigate the role it can play. But, so far what PE and other alternative asset classes have accomplished regarding ESG matters, what they say and what they do has to date not been addressed or solved by academia and research, not the matter as such nor in relation to the different kind of asset managers. Academic research is even underrepresented compared to analysis made by financial magazines and newspapers, advisory and consulting firms, and industry organizations.

2.1. Academic and Industry Analysis

Most academic work in relation to ESG and what asset managers have accomplished so far focuses on public financial markets and mutual stock funds, and since the turn of the millennium SRI investing even has become a mainstream¹⁴⁸. The potential impact on PE has received less attention, and not much has been published that links the topic directly with PE or other alternative asset classes and what the industry has accomplished so far in relation to ESG. It is a subject and a problem that has to date not been fully addressed or solved by academia and research. Without a doubt, there is some literature about Private Equity and other alternative asset classes in relation to ESG. But when using Google Scholar or other online data bases like EBSCO, EconBiz, Emerald Insight, JSTOR, NBER, Oxford Academic Journals, ResearchGate, Sage Journals, ScholarVox, ScienceDirect, Sphinx, Springer Link, SSRN, Wiley Online Library or even specialized ones like Shift's Sustainability Toolkit by MIT Sloan School of Management, one will only find literature about why the industry should be compliant, how it can achieve it, what the advantages are and that the industry in general is keen to enhance its ESG efforts.

¹⁴⁸ Sparkes R., Cowton C. (2004)

The following key words have been used:

- Private Equity or PE
- Private Markets
- Private Capital
- Real Estate or RE
- Infrastructure or Infra
- Private Debt or PD or debt or credit
- Venture Capital or VC
- Alternative(s)

In combination with:

- ESG or environment(al) social (corporate) governance
- CSR or corporate social responsibility
- CC or corporate citizenship
- SRI or social and sustainable and responsible investment(s) or investing
- Sustainab(le/ility) and/or responsib(le/ility)
- Ethical investing or investment(s)
- Green investing or investment(s)

One study of Dutch institutional investments into PE funds found out that two elements affect SRI in PE. The first one is institutional organizational structure and the other one internationalization¹⁴⁹. Bigger professional investors, who by nature also have deeper pockets, face more public scrutiny in relation to how and where they invest. The interviews that were conducted even revealed that SRI was considered as less risky than others.

¹⁴⁹ Cumming D., Johan S. (2007)

It was further noted that different regions around the world have a different cultural and, in some cases, weaker approach to SRI, like for example the USA and Asia, and another paper found out that a discrepancy does exist between Europe and the USA¹⁵⁰. However, the Dutch study is focused on LPs and does not address what PE and other alternative managers have accomplished.

Considering the positive effect ESG has on reputation and on minimizing risk in general, an analysis of VC firms in the USA revealed that better reputation can increase future performance and enables them to employ risk reduction more extensively in order to preserve their standing¹⁵¹. But reputation even goes beyond and eases the investment process¹⁵² and consequently that a particular asset manager is chosen as acquirer by the current owner, the management of the target company, the employees or unions. Although, prices of sale are only rarely disclosed, it is not a secret that this leads to the fact that sometimes an asset manager wins the deal that has not offered the highest price. Furthermore, good reputation even plays a major role in case of loan syndications¹⁵³ and on the timing of taking portfolio companies public¹⁵⁴.

The economic impact of the UN PRI was investigated as well¹⁵⁵. Between 2006 and 2011 PE funds from the USA were analyzed, employing UN PRI compliance as the key explanatory variable, and it was found out that if they adhere to them, they not only increase their reputation but also raise higher returns. A reason mentioned is that the introduction of ESG standards enhances a more disciplined investment process and management of portfolio companies, which in turn reduces risks that can influence corporate performance in the long term and consequently decrease returns. On the other hand, it was identified that implementation of non-financial drivers like ESG does not restrict investment opportunities and worsen financial performance. However, the study only found 25 UN PRI compliant funds out of a total of 135.

¹⁵⁰ Manigart S., De Waele K., Wright M., Robbie K., Desbrieres P., Sapienza H., Beekman A. (2000)

¹⁵¹ Petkova A., Wadhwa A., Yao X., Jain S. (2014)

¹⁵² Dimov D., Shepherd D., Sutcliffe K. (2007)

¹⁵³ Dimov D., Milanov H. (2010)

¹⁵⁴ Lee P., Wahal S. (2004)

¹⁵⁵ Teti E., Dell'Acqua A., Zocchi F. (2012)

Further analysis observed that SRI or ESG performance disclosure positively impacts the valuation of investments in the context of mergers and acquisitions¹⁵⁶ and the decision-making¹⁵⁷. In particular, bad ESG implementation is seen as critical, as those investments are considered as riskier. Environmental risks or social ones like workplace safety and the health of employees imply the likelihood of litigations and costs associated with it as well as the loss of trust of investors in the asset managers to be able to make the right investment decisions. Thus, bad ESG practices not only lower the likelihood of an acquisition, it decreases the value of potential or existing portfolio companies significantly, and good ones enhances it. ESG therefore has a meaningful impact on the investment decision and hence on the salability of investments and is hence in all probability to be increasingly required. This study has shown the advantages of integrating ESG in the investment process, but it did not disclose to what extent the alternative industry is doing it.

Considering the latest and biggest analysis on ESG and CFP that combined over 2,000 individual studies, which also surveyed different regions, found out that all portfolio studies show a positive effect of 51.5% for North America, 45.6% for Europe, for the entire developed world of 49.8% and for emerging markets even 70.8%¹⁵⁸. One could therefore argue that that the potential for ESG enhancement is bigger in North America than in Europe and even larger in emerging markets.

Another academic paper dealt with the question why PE integrates ESG and analyzed the French PE market in 2011, and it was found out that it is implemented because of a new belief for strategic value creation, increased risk management, new market opportunities, differentiation and increased compliance not only due to investor demand¹⁵⁹. Integrating ESG matters in the acquisition process and, in particular, during the DD do not only act as risk management tool but also provide important information for the value creation during the holding period. It was also noted that ESG requires sound expertise, and it is therefore more likely that larger manager with more human capital have the ability to be engaged.

¹⁵⁶ Aktas N., De Bodt E., Cousin J. (2011)

¹⁵⁷ Crifo P., Forget V., Teyssier S. (2015)

¹⁵⁸ Friede G., Busch T., Bassen A. (2015)

¹⁵⁹ Crifo P., Forget V. (2013)

In addition, it was stated that only a strategic implementation into the business model ensures the benefits rather than just an approach that is responding to emerging issues, which is seen as a light course of action. However, even if 74 French PE firms have been analyzed, which is more than previous studies, it focuses on a single market. And the criteria were public information, being a UN PRI signatory, managing a fund that is focused on environmental or social matters, and publishing responsible investment on their website.

Only two academic papers were found that look a little bit closer at what PE and VC are doing in relation to CSR or ESG. One of them investigates how PE funds have an impact on CSR of their portfolio companies during the holding period¹⁶⁰. However, the study only investigated three case studies of Scandinavian portfolio companies owned by Scandinavian PE investors, and it was conducted in 2011 when CSR or ESG in PE was starting to kick off. The undertaken efforts were justified to obtain the license to operate, and therefore the asset managers helped the companies to set up all sorts of policies in relation to social responsibility policies and code of conducts, but it was revealed that only external consultants provided support. It was already mentioned that a potential IPO was considered and thus ESG and some kind of reporting standard was required in order to ease the process, but in general the businesses have to be interesting for new possible owners, and hence ESG was implemented, as this was viewed as one of the drivers for bigger and better companies. In order to achieve it, shareholder activism was cited as the main tool to exit a portfolio company successfully. In addition, it was already noted that more and more investors demand a sustainable and responsible approach but also that it is difficult to know how to measure it, as it is an intangible asset. Introducing CSR measures are seen as a tool to positively affect the exit possibilities especially in case of an IPO and therefore as value creation. The obstacle that no common approach does exist was noted as well. But it was also found out and that the PE industry increased its focus on CSR, that it has started to formalize their approach, and that it has already principles that are implemented into the business of their portfolio companies.

¹⁶⁰ Dalen C., (2011)

The other study shows an increasing level of ESG compliance of PE and VC funds in the UK and the USA¹⁶¹. A significant sample of 122 companies from both countries have been analyzed how they incorporate ESG matters in their investment process, and it was found out that almost all of them report some sort of ESG on their websites, although a majority is just providing very little information in relation how they really do it. However, it was also revealed that asset managers dealing with environmental sensitive investments are more advanced than others. And in addition, regional differences were noted as well that affect ESG considerations. Although, this paper focuses on the two main countries where alternative asset managers are headquartered, it ignores any other ones. And the main source for the analysis were the corporate websites of the asset managers, which might not provide fully reliable picture, as asset managers are not finally bound to what they publish and only what they guarantee to their investors in their fund documents. Consequently, relying on websites only runs the risk of greenwashing. In order to really understand what SRI is, it was also questioned if the term can and finally should be standardized¹⁶², which would then count for other concepts like ESG as well. Problems for the standardization can result from cultural differences, different regions, and therefore from different norms and ideologies, but in the present case the size of the asset managers and their asset classes can of course have an impact as well. These discrepancies can even derive from different stakeholder perceptions, and consequently terminological, definitional, strategic views, how it can be integrated, and practical approaches, how it can be implemented into investment decisions, can vary. It is therefore suggested that either a legislative or industry-initiated top-down approach should come to a common understanding, as the absence of an agreed approach surely needs to be addressed¹⁶³.

A different study of when CSR motivates investors however revealed that there are dissonances in the SRI decision-making process¹⁶⁴. Although investors recognize, appreciate and value SRI, they finally base their decision on pure financial matters. And in addition, even if investors believe in premier performance of SRI, they do not attribute a good financial performance to their sustainable and responsible investment choice.

¹⁶¹ Amankwah G., Abonge H. (2011)

¹⁶² Sandberg J., Juravle C., Hedeström T., Hamilton I. (2009)

¹⁶³ Sparkes R. (2001)

¹⁶⁴ Heimann M., Lobre-Lebraty K. (2019)

However, especially one factor that was researched academically provides confidence that ESG really has the chance to become the mainstream in the alternative asset industry, as action of peers as usual causes followers. The adoptions by a few or some facilitates the development of a shared understanding and enables the set-up of certain standards. In particular, industry leaders or the big ones do it and if evidence is submitted that a given course of action is not only viable but also right and rewarding, other alternative firms will follow¹⁶⁵.

As the legitimization of ESG grows, the industry may interpret it as proven. Those companies that have not yet applied ESG standards may feel pressure to act or risk being left behind by those of their peers that have already done it. Thus, more asset managers apply ESG standards.

In 2009, Novethic, a French expert in sustainable finance and labeling agency, sent a questionnaire to 300 VC, growth, and PE firms in France, to which 71 firms responded on the question what PE thinks of the integration of ESG criteria¹⁶⁶. 62% replied that they take ESG into account in their decision-making. The share of PE managers was 69%, of growth firms 56%, and the portion of VC companies was 58%.

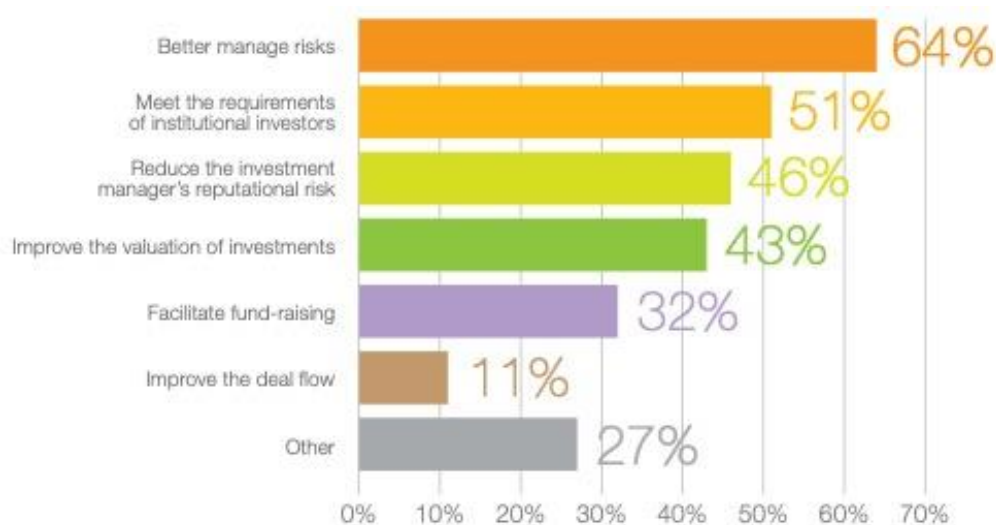
In the year 2011, they sent the questionnaire to 309 alternative asset managers in France, to which 74 firms responded on the question if general partners in France integrate ESG¹⁶⁷. 30% of them signed the UN PRI, 35% had an ESG policy in place, but only 15% have published it. 46% train their employees on the integration of ESG issues into their business, but only 25% have implemented it into the DD process. 51% monitor portfolio companies to ensure ESG is integrated, but only 18% provide guidance to them. Only 17% have measured the impact of ESG on their portfolio, and only 13% report on their efforts, just 1% publicly. However, even if only the French alternative managers were analyzed, the benefits of ESG implementation are clear to many of the surveyed asset managers.

¹⁶⁵ DiMaggio P., Powell W. (1983)

¹⁶⁶ https://www.novethic.com/fileadmin/user_upload/tx_ausynovethicpresse/communiques/CP_-private_equity_UK.pdf

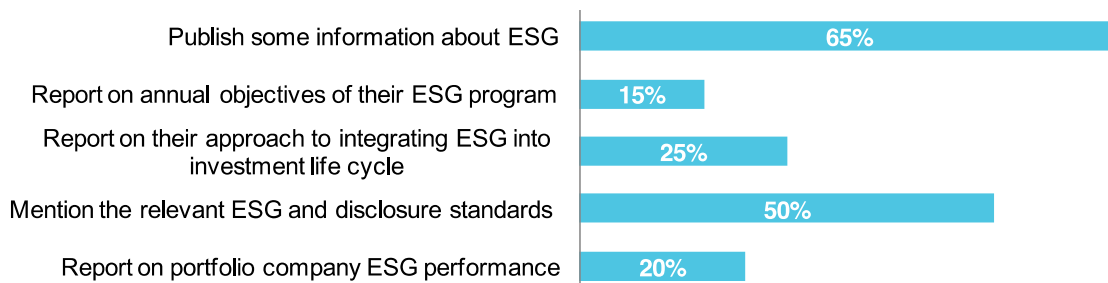
¹⁶⁷ https://www.novethic.fr/fileadmin/user_upload/tx_ausynovethicetudes/pdf_complets/enquete_PE_EN_2011.pdf

Figure 15: Reasons for ESG Integration in France¹⁶⁸



BSR, a global nonprofit business network and consultancy dedicated to sustainability, has analyzed the public ESG reporting of the 10 largest PE companies in the USA and in Europe in 2012 and found out that 65% publish some information, but even if they do not provide a report, they mention ESG on their website¹⁶⁹. 38% show their efforts via their annual report and only 20%, two firms, have a dedicated ESG report. Only three companies report on their objectives, just 25% provide insight how ESG is embedded in their processes, and again 20%, two companies, provide insight into ESG performance of their portfolio. The survey already provides some findings on how ESG reporting is perceived and done, but it was already conducted some years ago and only analyzed a small sample.

Figure 16: BSR ESG Reporting Survey¹⁷⁰



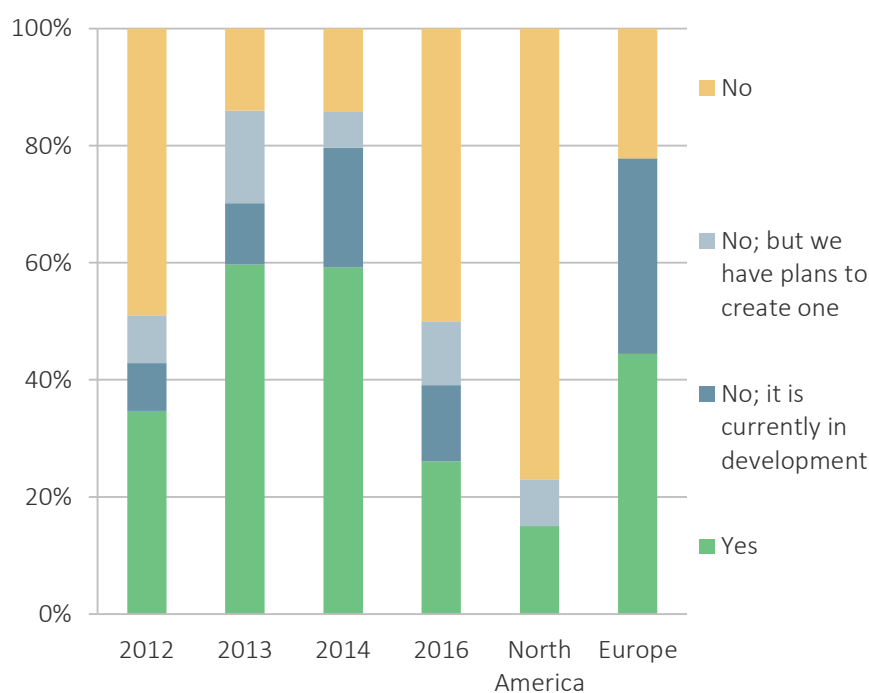
¹⁶⁸ https://www.novethic.fr/fileadmin/user_upload/tx_ausynovethicetudes/pdf_complets/en-quete_PE_EN_2011.pdf

¹⁶⁹ <https://www.bsr.org/en/our-insights/report-view/reporting-on-environmental-social-and-governance-considerations-in-the-priv>

¹⁷⁰ Ibidem

Pitchbook, a financial data company that provides business professionals with data on private and public markets, for the fourth time conducted a survey of 48 PE firms in 2016 to see where the industry stands in relation to ESG¹⁷¹. It was revealed that smaller firms still lack behind, as they often have different or other priorities than bigger ones. Also, European managers are doing better than their rivals from other locations. The replies that an ESG management program is in place even decreased compared to the previous survey as of 2014. However, the respondents were different, and in 2016 more smaller asset managers replied.

Figure 17: ESG Management Program Surveyed by Pitchbook¹⁷²



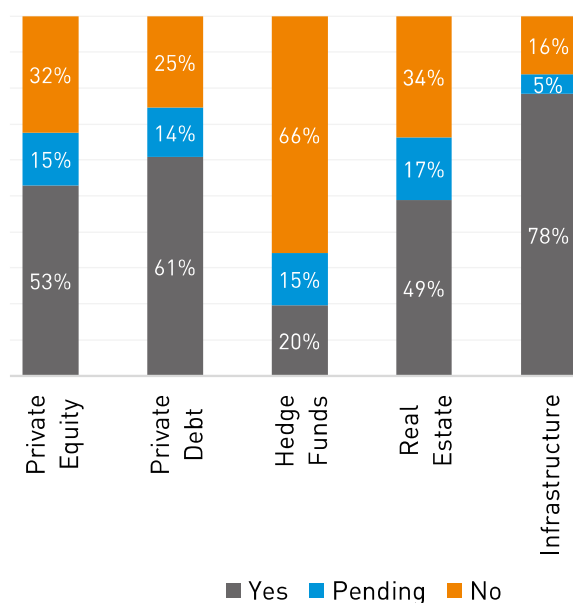
The main reason why PE firms start to be engaged is investor demand, and the most important phase for ESG considerations is the DD process. It was also noticed that for most companies it is more crucial to implement ESG at portfolio level rather than inhouse. The biggest challenge for the participants was and is measuring effective ESG performance followed by the costs associated with the ESG program, which, in particular, applies to smaller firms.

¹⁷¹ <https://pitchbook.com/news/reports/2016-private-equity-esg-survey>

¹⁷² Ibidem

And although the number increased slightly, only a third of all asset managers share their efforts with investors. In their fund manager survey in November 2018 Preqin, an online data base for the alternative assets industry, asked 300 fund managers investing in all different alternative asset classes if they have an ESG policy in place and found out that Infra ranks first followed by PD, PE and RE¹⁷³.

Figure 18: ESG Policies in Different Asset Classes¹⁷⁴



In 2012, PwC interviewed 17 PE houses, 6 of the top ten largest and 11 of the top 50 largest firms concerning the integration of ESG¹⁷⁵. 10 firms are headquartered in Europe and seven in the USA. 88% responded that investors' attention to ESG will increase going forward, which would need to be considered when future funds will be launched, and hence ESG might be introduced into the fund documents. All firms said that ESG is part of their investment process, however different approaches do exist from ad-hoc ones to case-by-case analysis to comprehensive DD process. The most interesting that was revealed was that PE companies from the US focus primarily on eco-efficiencies like waste reduction, recycling and natural resources management, as this is seen as driver for cost reduction.

¹⁷³ <https://www.preqin.com/insights/2018>

¹⁷⁴ Ibidem

¹⁷⁵ <https://www.pwc.com/gx/en/sustainability/research-insights/assets/private-equity-survey-sustainability.pdf>

European managers however look at the full ESG spectrum, but good corporate governance is seen as important by both and considered as already well addressed. But 50% of the participants still did not have an ESG policy in place, 40% measure their cost savings, though only 47% report them, although 94% believe that ESG can create value. And finally, 94% of the respondents said that they will increase their ESG commitment over the next five years. In 2013, PwC then surveyed 103 PE houses from 18 countries that have an AUM of more than USD 860 billion¹⁷⁶. 57% said that they have a formalized ESG approach, and 55% stated that they have a dedicated policy in place. 56% mentioned that they disclose their efforts to their investors, but a vast majority is still only monitoring their efforts rather than measuring it.

The US firms again show an ESG approach that is driven by eco-efficiency matters like energy, fuel, and water use, reducing emissions and waste, which is focused on cost savings and thus can be measured. Managing ESG at portfolio company level is still more advanced at larger firms. Risk management is now the main driver for their commitment before investor demand, although it is believed that LP requests will increase. However, 45% of the company's staff has not yet received any ESG training.

A further survey of PwC with 111 alternative firms from 22 countries was conducted in 2016¹⁷⁷. Compared to 21% in 2013, now 46% responded that a majority of their investors is seeking for ESG even only 17% feel pressure from them. For 44% of the surveyed risk management is still the main driver. 83% have an ESG policy in place. 60% mentioned that they always screen potential investments for ESG risks, and even 41% would be willing to pay a premium for high ESG standard target companies. 83% claimed that they report their efforts to investors compared with 56% in 2013, but only 58% include details of their portfolio companies. ESG training for all employees did increase to 46%, and 44% of the respondents said that they plan to assess the impact of the SDGs in the future.

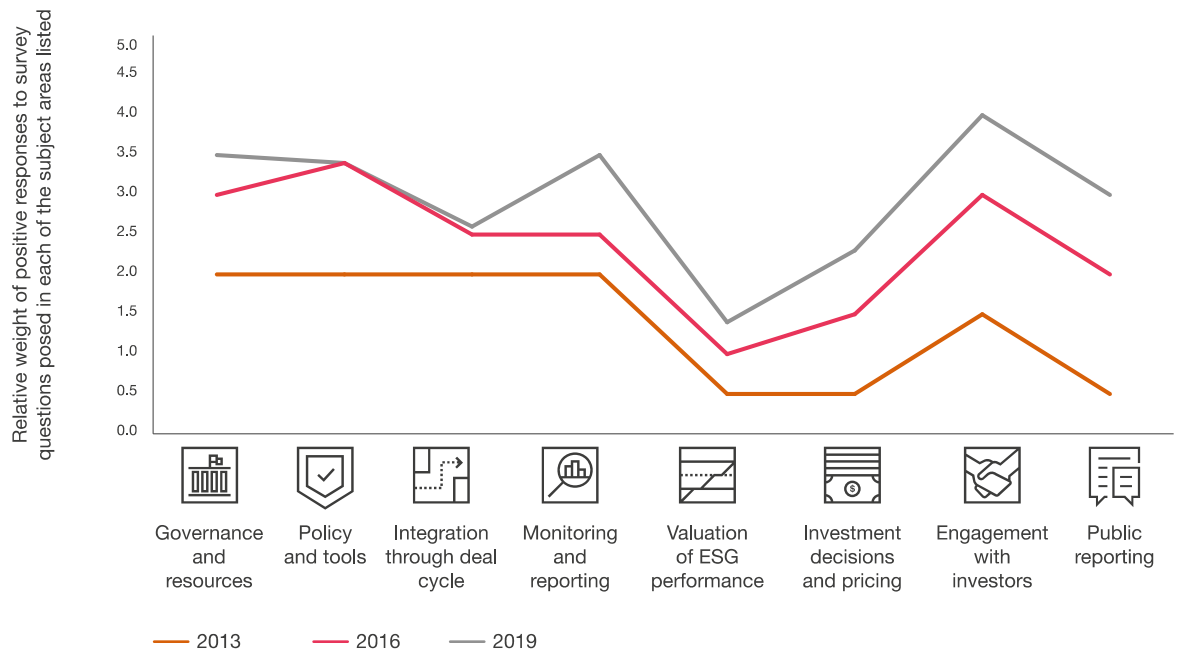
¹⁷⁶ https://www.pwc.com/gx/en/sustainability/publications/assets/putting-a-price-on-value_pwc-private-equity-survey.pdf

¹⁷⁷ <https://www.pwc.com/gx/en/services/sustainability/private-equity-and-the-responsible-investment-journey.html>

However, 66% of the participants are headquartered in Europe, 15% in the Asia-Pacific region, 8% in South America, and only 6% in North America, where most of the alternative managers are located, and different sizes and asset class of the firms were not proportionally represented.

The latest PwC survey was conducted in 2019 with 125 alternative firms from 35 countries¹⁷⁸. 72% of all respondents said that they have an ESG policy in place. 41% collaborate with the UN PRI or other initiatives. 45% mentioned that they do an ESG screening for potential new investments, and 52% say that they have developed internal KPIs. 89% claim that they report their ESG efforts, but only 41% measure them. With 63% almost the same percentage than in 2016 said that a robust and agreed methodology is the main reason why the value of ESG performance is not measured. But participants were with 78% headquartered in Europe and only 9% in North America, and again different sizes and asset class of the firms were again not proportionally represented.

Figure 19: Approach to ESG over Time Surveyed by PwC¹⁷⁹



¹⁷⁸ <https://www.pwc.com/gx/en/services/sustainability/publications/private-equity-and-the-responsible-investment-survey.html>

¹⁷⁹ Ibidem

The 2019 Asset Management Survey of Deloitte asked 23 alternative firms about today's market trends and found out that only 24% of the PE and PD companies cover ESG in their funds, but 39% believe that it will increase in the next three years¹⁸⁰. And 100% of the surveyed companies said that they promote ESG in Europe but only 43% did it in the Asia Pacific region and in North America. However, the number of participants was rather small, and the survey covered more the traditional asset managers that invest in alternatives as well.

In order to provide an overview of the previous academic and industry research main and core statements can be summarized on a high level as follows and will be verified again in the data and findings and their discussion.

Chart 3: Summary of Academic and Industry Analysis



¹⁸⁰ <https://www2.deloitte.com/lu/en/pages/investment-management/articles/what-is-the-new-gold-rush-route-asset-managers.html>

2.2. Alternative Research

Only rarely, it is referenced what PE firms and others have really achieved and findings vary from study to study. Even industry organization like Invest Europe, the British Venture Capital Association, or the American Investment Council in the US did not publish many details so far except for a few case studies of portfolio companies that have integrated ESG. But it is mentioned that it is already done to a certain extent and the industry has the intention to do more. The same counts for reputable sources like the Big 4, Deloitte, EY, KPMG, and PwC, or consulting firms like Bain, Kearney, McKinsey or Mercer. The importance of ESG is reported, its benefits, and that the industry is keen to be more engaged in the future. The reason is, as already highlighted, that a lot of asset managers do not disclose their engagement yet in detail or if so, not to its fullest extent. Another reason might be, that the industry has not yet been researched in detail. However, secondary literature of any kind is of course reviewed, as it provides additional and supporting insights and is of relevance, even if it implies a certain risk that sources that are professionally linked with the alternative industry could bear the risk of being biased. But the classic secondary research is therefore not effective and does not lead to a success or gives a definite answer in order to determine what the industry has accomplished so far.

It would also be possible to find an answer via primary research by conducting interviews or by sending questionnaires or by conducting a survey. However, open, semi-structured, interviews might lead to answers that are difficult to or even not comparable at all, as questions are open ended and flow according to how the participant responds to each. Another weakness of qualitative interviews is to ask the right questions and the reliance on respondents' accuracy or in general their willingness to give answers that might be confidential or just vague. They are also time consuming. It is similar with questionnaires. Although they are much more efficient, as one could reach more respondents with less effort, it is not certain that recipients will answer, and even if so that all questions are answered or answered diligently. Recipients might also have a different kind of understanding and interpret the questions in another way. Another limitation to obtaining data via a survey is the likelihood of sample selection bias. Because of such reasons, neither interviews nor questionnaires would lead to a success in order to determine what the industry has achieved so far.

Another approach could be the evaluation of case studies. They could reveal what the industry has accomplished so far within a real-life context. As mentioned, industry organizations, the UN PRI, and also PE and other alternative asset managers have published some of them. However, only a few firms do it, and these are the bigger and more well-known ones. The vast majority covers PE, RE, Infra, but VC cases are much less available, and there are almost none for PD. There is also a certain risk that the published examples are the showcases, and it is barely possible to assess if all investments of such asset managers automatically receive the same attention or if it was just a one-time story. Hence, case studies are not suited to provide the overall picture what the alternative industry has achieved so far in relation to ESG.

The ideal research approach would be the one that ensures that answers will either be given, or if an answer is not available it would directly lead to a consequence or result. The research should further find out to what extent PE and other alternative asset classes have really committed to ESG, and the greater the sample, the more valid, reliable, and stronger the findings will be.

2.3. Research Documents

Basis for their investment is also the prospectus of the funds, the PPM, which highlights the terms and the offering for investors itself, previous performance details, investments to be made, either equity or debt¹⁸¹. It details the management team in charge, risk factors, use of proceeds, tax implications and other regulatory disclosures but also how the investment shall be made, the strategy and their approach including the investment process of which ESG could be a part of. Once a LP has agreed to the terms of the PPM, it will enter into a subscription agreement to which the LPA and the PPM either refer to or are even annexed. LPs that either have a special relationship with the GP or want to commit a significant high amount are even able to negotiate a so-called side letter that gives them special conditions. This includes a rebate on the fees they have to pay to the GP, restricts certain kinds of investments in for example pornography or weapons of war but could also involve a certain investment process including ESG. All such documents, which are not disclosed publicly, are binding for the GP, and if an ESG approach has been stipulated, the GP has to adhere to it.

¹⁸¹ Fraser-Sampson G. (2010)

Conversely, if ESG is not part of the above-mentioned fund documents, a GP could claim that it is important for them and they would like to integrate it in their investment process, but they would have no obligation to really implement it. It is therefore most valid, reliable and the strongest research approach to analyze such fund documents. Some asset managers have also put their efforts in writing and set up an ESG policy. In such cases, this document will be used as an additional source for evidence.

3. Methodology

The desire and passion to research what PE and other alternative asset managers have accomplished so far in relation to ESG comes from the professional background of the researcher who works in the industry for 13 years during which time he worked for leading alternative asset managers and established a relationship with many others. His interest also stems from prior academic analysis of mutual and PE funds and if their sustainable and responsible investments pay off that was conducted as MBA master thesis for the European Investment Bank in 2013 and by which he already made contacts with asset managers in relation to ESG. In order to collect a meaningful and good sample it was to be evaluated what alternative managers shall be researched. However, no official list does exist that provides a ranking of the industry and shows the biggest firms by AUM, as not all disclose such numbers publicly. Another important figure is available, though. Anytime, when a PE or other alternative fund has raised a new fund, the firm is disclosing how much money they have received from investors as commitments, and these amounts are tracked. Therefore, in a mixed research approach of quantitative and qualitative analysis at first the industry as such will be analyzed and afterwards what it has truly accomplished in relation to ESG, what they say and what they do.

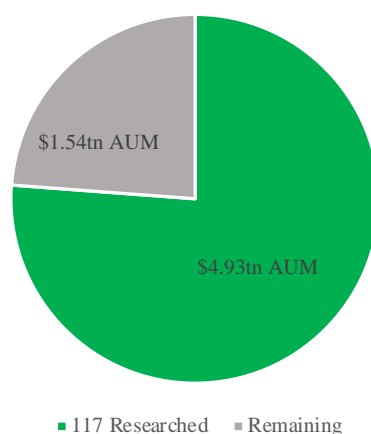
3.1. Quantitative Data Analysis

In order to quantify the collection and analysis of data and to establish and validate it in relation to the research questions, it is to be determined what the sample could be. One source is Private Equity International (“PEI”)¹⁸², an online magazine of PEI Media, a UK financial media group focused on global alternative asset classes. The other one is Preqin, an online data base for the alternative assets industry.

¹⁸² <https://www.privateequityinternational.com/pei-300/>

Both, PEI and Preqin are regularly quoted by the financial press. PEI issues a yearly report that shows the 300 PE firms including VC that have raised most money within the last five years. They further publish the same yearly report for the 100 most successful RE managers¹⁸³, and for 50 Infra¹⁸⁴ and PD firms¹⁸⁵. Preqin's yearly reports show the 100 PE and VC firms¹⁸⁶ that have raised most money within the last ten years and their current dry powder. They do the same for the 100 most successful RE¹⁸⁷, Infra¹⁸⁸ and PD managers¹⁸⁹. In order to collect the best feasible sample that reflects most firms and covers as much as possible of the global AUM, PEI and Preqin shall be used for PE, VC, RE, Infra and PD firms. The amount a PE firm or another alternative asset manager has raised is only one indication for the size and (financial) power of the investment firm. The more meaningful figure is the AUM, as it includes the committed capital, dry powder, and asset appreciation. In total 117 investment managers have been researched. Compared with figures provided by PEI and Preqin, the total AUM of such 117 firms as of the third quarter 2019 was USD 4.93 trillion, which reflects 76,2% of the world's total alternative assets of USD 6.47 trillion.

Chart 4: Researched Asset Managers in Total



¹⁸³ <https://www.perenews.com/pere-100/>

¹⁸⁴ <https://www.infrastructureinvestor.com/infrastructure-investor-50/>

¹⁸⁵ <https://www.privateinvestor.com/pdi-50/>

¹⁸⁶ <https://www.preqin.com/insights/special-reports-and-factsheets/2019-preqin-global-private-equity-venture-capital-league-tables/25857>

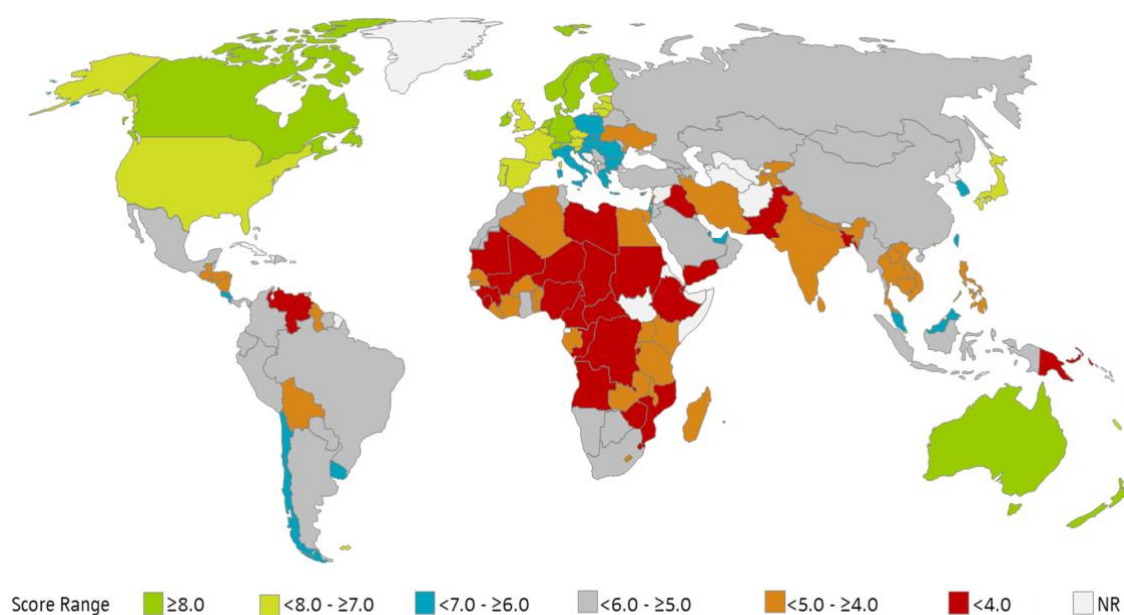
¹⁸⁷ <https://www.preqin.com/insights/global-alternatives-reports/2020-preqin-global-real-estate-report/26657>

¹⁸⁸ <https://www.preqin.com/insights/global-alternatives-reports/2020-preqin-global-infrastructure-report/26654>

¹⁸⁹ <https://www.preqin.com/insights/global-alternatives-reports/2020-preqin-global-private-debt-report/26656>

At first, a list of all PE firms and other alternative asset managers for which fund documents are available has been set up with independent variables of controlled inputs. All firms are ranked in the PEI and Preqin publications. The AUM was determined with the help of public available data and the fund documents in order to assess the total AUM of the research group, and the size of the asset managers in order to group them in small, medium sized and large firms. A further information being collected is the location of the asset managers in order to find out if regional or cultural differences exist. RobecoSAM, an investment specialist focused exclusively on sustainable investing and part of Robeco, a world leading asset management firm, regularly publishes a country ESG ranking.

Figure 20: Country ESG Rating Map¹⁹⁰



Although RebecoSAM is active in the public securities sector only, it is to be seen if the same applies to alternative funds as well. Then, all companies are classified in accordance with their investment strategy to find out if PE, VC, RE, Infra and PD funds have different approaches. The first indication if one of the investment managers is considering ESG is collected from their website, as the vast majority has a more or less sophisticated corporate web presence, which functions as a medium of communicating important company information.

¹⁹⁰ <https://www.robecosam.com/en/insights/2019/norway-the-worlds-most-sustainable-country.html>

By that, it can be found out if the company deemed ESG as so important as to be mentioned publicly. However, a website might at first be used to provide information to the general public, as potential investors would use more reliable statements and data. Some asset managers even publish own ESG reports or policies that present their approach and efforts, but in some cases, these documents are only available for potential investors. In any case, their existence is researched. But secondly, all such information shall be compared with the fund documents if the web content is just a notice of intent and therefore to be considered as marketing, if the ESG policy is just a stand-alone document, or if ESG is also part of the investor documents that legally bind the asset manager.

As a next step, the data base of the UN PRI is researched. If the GPs are signatories, they are bound to the set of principles. But even if they are no signatories, it will be researched if they at least refer to the UN PRI or even the SDGs. It is also analyzed if the companies adhere to any other framework, initiative or guideline like for example the United Nations Environment Program Finance Initiative, the UN Global Compact, the Global Reporting Initiative, the International Corporate Governance Network, or the International Finance Corporation Guidelines. If this is the case, one could already consider that ESG has a certain importance for the investment firm, although such frameworks, initiatives or guidelines are voluntary only.

Then, the fund documents, the LPA, PPM, subscriptions agreements, side letters, annual or quarterly reports and if available ESG policies will be analyzed in detail if ESG is a part of it and even more how many of the asset managers deal with ESG, how many have a comprehensive commitment to sustainability and responsibility, for how many is ESG an integrated part of their investment process and if they screen investments, if it is part of their DD process and if so, how much of them just observe ESG criteria, if the firms utilize shareholder activism and for how many could negative results even be a red flag that stops a further decision-making. Finally, it will be investigated if they measure and report their efforts and to what extent. But furthermore, it is also analyzed if all three pillars of ESG are mentioned throughout the sustainability and responsibility approach of all asset managers, on their website, in policies, and fund documents, or if one or the other is just focusing on one or two of them.

3.2. Qualitative Data Analysis

In order to finally assess what has been accomplished by the alternative industry, the content of its efforts need to be investigated and interpreted by means of dependent variables that come from the previous collected inputs. Therefore, a seven-stage points-based system will be set up for each firm that shows how strong and deep their commitment to ESG is. No point means that ESG is not mentioned at all on the company's website, that the firm is not a signatory to any framework, initiatives or guidelines, that ESG is not part of any of the binding fund documents, that they do not screen investments at all or analyze it in the DD process, that red flags would not stop entering into an acquisition, that they would not utilize shareholder activism to enhance ESG, and no ESG efforts are measured and reported. It can then be considered that ESG is not of interest for the asset manager so far, or at least that the firm has not yet set up their approach to ESG.

One point would be given to PE and other alternative asset managers who just refer to ESG as such either on their website, or in their fund documents or are signatories to one of the frameworks, initiatives or guidelines, although they are only a voluntary and aspirational set of investment principles. Such company's standpoint that they claim to consider ESG could be viewed as marketing to initially attract investors and to please other stakeholders who do not have access to the fund documents. However, these asset managers must be given credit that they have already understood the importance ESG has, and it is to be seen if they will develop a more sophisticated approach in the future.

Those asset managers who have a more comprehensive commitment to sustainability and responsibility and mention ESG as an integrated part of their investment process is given another point, if they evaluate the ESG compliance of their potential target companies during their DD process. However, the ESG DD will be analyzed as well, if it is primarily a kind of risk assessment that shall show what the asset managers shall take care of once it has taken over the active ownership. In such cases, the DD findings are not considered as a deal-breaker but merely as a field for improvement.

A third point is awarded to such firms that analyze ESG criteria on fund level by not considering certain types of investments via a screening like industries that are affected by pollution, child labor or deal with pornography or weapons of war, which could be caused by investor demand and their own restrictions in what sectors they can invest into.

Asset managers for which ESG is not only an integrated part of their investment process but also a potential deal-breaker if red flags are found will receive a fourth point, as it can be considered that they have fully integrated ESG in their investment process. Such firms evaluate ESG during the DD process as well, but as the cancellation of a potential investment is possible, their analysis even goes deeper than for those who see such findings as potential improvements.

As such kinds of potential improvements can be realized during the holding period of the investments, a fifth point will be given to those firms that utilize shareholder activism for the implementation of ESG standards.

Finally, a sixth and last point will be awarded to those PE and other alternative asset managers who even measure their efforts and report them either publicly or to investors.

Chart 5: The Points-Based-System



In addition, it is analyzed what ESG factors the asset managers consider for their own company and if they go beyond initiatives for cost reduction and community services. The alternative industry is known for its light and therefore aggressive taxation approaches like for example offshore fund domiciles based on the Cayman Islands, Bermuda, Panama, the US and the British Virgin Islands, the Marshall Islands and the Channel Islands, which are listed as tax havens by the EU¹⁹¹, and even if Guernsey and Jersey have been removed from that list, some investors still avoid the Channel Islands.

Such business behavior can nowadays not be seen as good corporate governance anymore. However, many firms have already left or are about to leave offshore domiciles, and recent new regulations like “base erosion and profit shifting”¹⁹² by the Organization for Economic Co-Operation and Development to which more than 100 countries and jurisdictions adhere or the “anti-tax avoidance directive”¹⁹³ that addresses tax avoidance strategies have caused a rethinking of the industry. But if PE firms or other alternative asset managers according to their fund documents still stick to such jurisdictions and practices, their number is mentioned separately, and they are degraded by one point if they have had at least received one or better.

Only such companies, which truly consider ESG factors as potential deal-breakers, use shareholder activism for improvements, measure and report their efforts and adhere to good corporate and tax governance can be considered as having fully integrated ESG in their business. But as the new tax regulations were introduced only recently, the degradation does not apply to those PE and other alternative asset managers who have started moving funds away from offshore domiciles and do not use aggressive taxation approaches anymore. In this context, it is not only analyzed if the firms are onshore or offshore but also if they are onshore if they have set up funds in the Grand-Duchy of Luxembourg (Luxembourg), as the country will be subject to a separate analysis in relation to its importance for the alternative industry and its ESG efforts.

¹⁹¹ <https://www.europarl.europa.eu/cmsdata/147412/7%20-%2001%20EPRS-Briefing-621872-Listing-tax-havens-by-the-EU-FINAL.PDF>

¹⁹² <http://www.oecd.org/tax/beps/>

¹⁹³ https://ec.europa.eu/taxation_customs/business/company-tax/anti-tax-avoidance-package/anti-tax-avoidance-directive_en

Considering the researchers knowledge from a previous study and his practical experience, the quantitative approach together with the qualitative one that is based on the empiric data should have avoided any personal biases and provide a valid and objective analysis that answers the research question what PE and other alternative asset managers have accomplished so far in relation to ESG matters.

4. Data and Findings

It seems that the growth of sustainable and responsible funds is growing rapidly, that there is a market for it, and that it pays off, as today no business can any longer be disconnected from ESG, and ESG cannot be detached from managing investments. But the research questions to be answered is what have PE and other alternative asset managers really have been accomplished.

4.1. Alternative Asset Managers and Their Accomplishments

A satisfactory reply to the research question needs to be given by a sufficient sample that is great and strong enough to cover a significant portion of the industry, is adequately reliable to provide informative value, and is therefore valid to hold up.

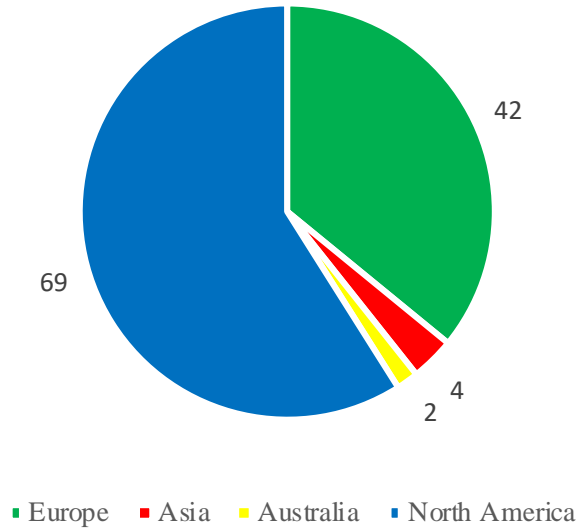
4.1.1. Researched Asset Managers

In total, 117 PE and other alternative asset managers investment managers have been researched. Out of these, 2 of them have their headquarter in Australia, 4 in Canada, 4 in China, 7 in France, 1 in Germany, 1 in Italy, 1 in Spain, 2 in Sweden, 2 in Switzerland, 1 in The Netherlands, 27 in the United Kingdom, and 65 in the United States of America. That the vast majority of firms is located in the United States is not surprising, as the idea of PE investing originates historically from there, and the higher number of asset managers in the UK is due to its more active stock market¹⁹⁴. The split by countries and regions also reflects the listings by PEI and Preqin.

In order to evaluate cultural differences, companies are grouped by continent, in 42 European asset managers, 4 from Asia of which all are headquartered in China, 2 from Australia, and 69 from North America, whereas any discrepancy between Canadian and US firms is monitored.

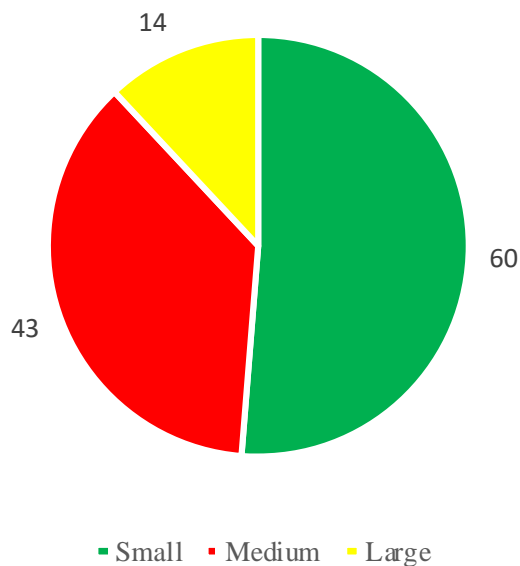
¹⁹⁴ Black B., Gilson R. (1998)

Chart 6: Researched Asset Managers by Region



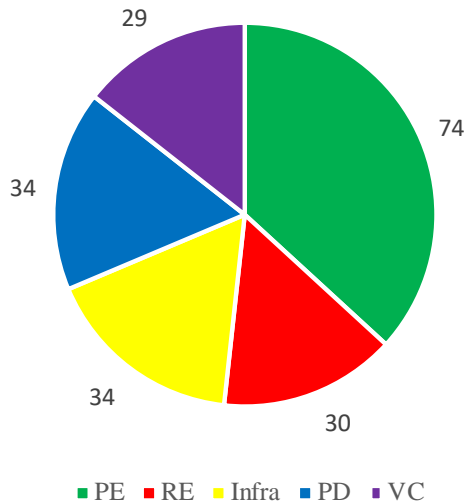
All 117 asset managers together have an AUM of USD 4.93 trillion, but in order to assess any differences, they are also grouped by size. All firms that manage up to USD 10 billion are considered as small, and with more than that and up to USD 100 billion as mid-size. Above this amount, all investment companies are considered as large. Accordingly, 60 asset managers are classified as small, 43 as medium-sized, and 14 as large. Again, this proportion reflects the listings by PEI and Preqin.

Chart 7: Researched Asset Managers by Size



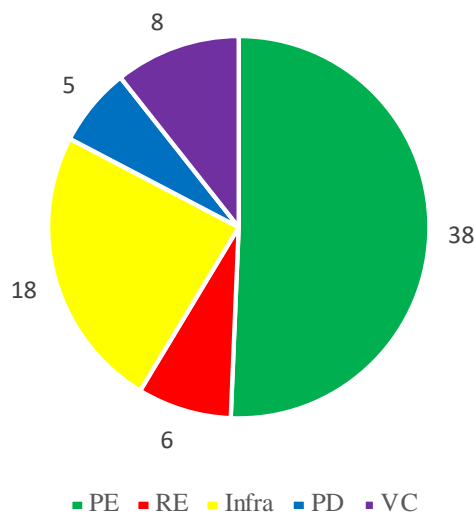
The alternative assets managers researched apply different investment strategies, PE, VC, RE, Infra and PD. 74 pursue PE, 30 RE, 34 Infra, 34 PD, and 29 VC or growth investments.

Chart 8: Researched Asset Managers by Asset Class



However, it is to be noted that 42 of the firms invests in more than just a single asset class, which applies, in particular, to mid-size and large managers. On average, it is almost three different strategies, which is considered as diversification and to accommodate different investor demands. However, 75 asset managers pursue only a single strategy, 38 PE, 6 RE, 18 Infra, 5 PD, and 8 VC.

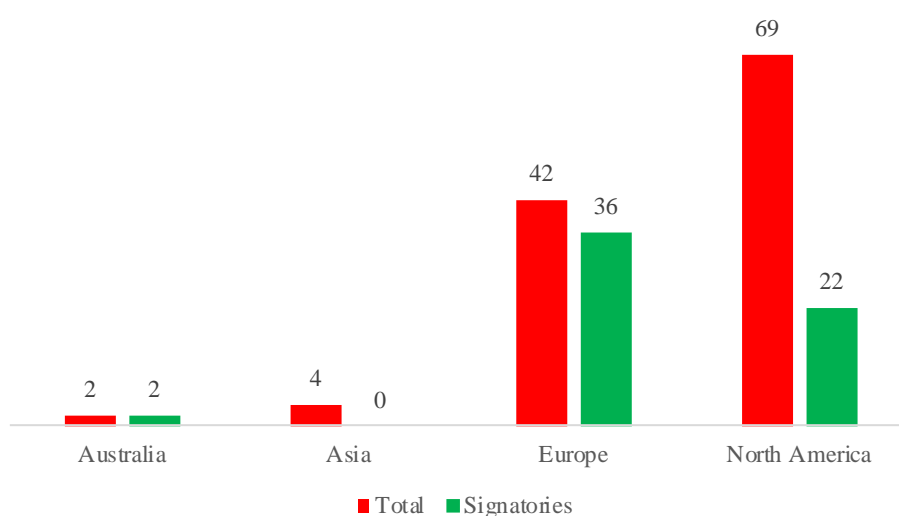
Chart 9: Single Asset Class Asset Managers



4.1.2. The Sample and the UN PRI

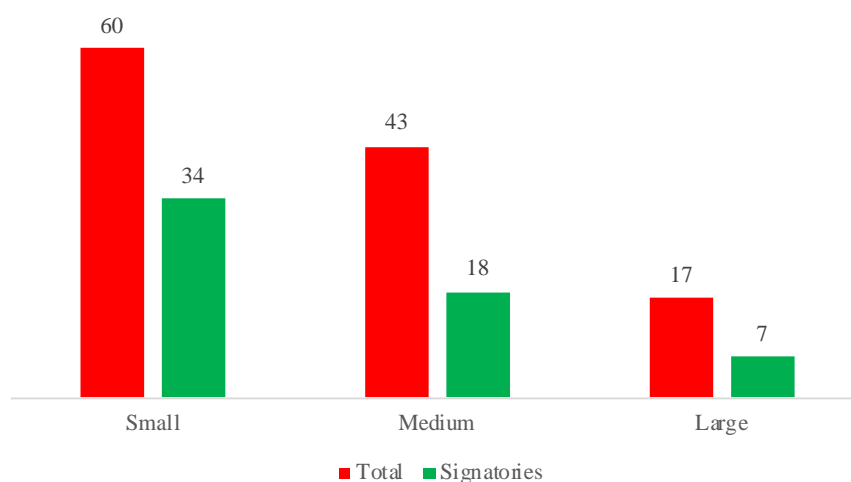
Out of the 117 researched PE and other alternative firms, 60 are signatories of the UN PRI with an AUM of USD 2.16 trillion. Both companies from Australia have signed the principles, none of the Chinese ones, but 36 out of 42 European firms and only 22 out of 69 asset managers from North American, which includes 3 out of the 4 Canadian firms.

Chart 10: Researched UN PRI Signatories by Location



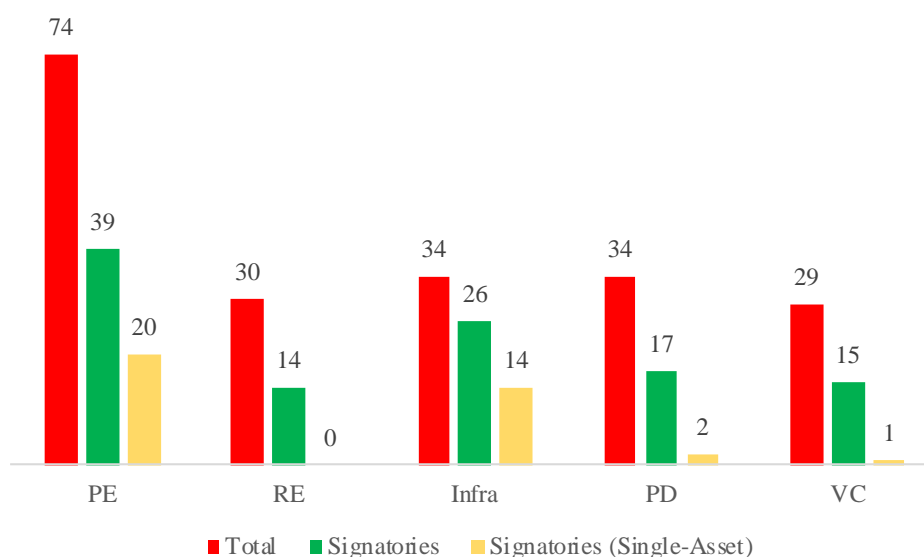
With 34 asset managers more than half of the small firms are signatories, 18 out of 43 mid-size ones, and with 7 out of 14 again half of the researched large companies, which shows that the size does not have any effect on signing the UN PRI.

Chart 11: Researched UN PRI Signatories by Size



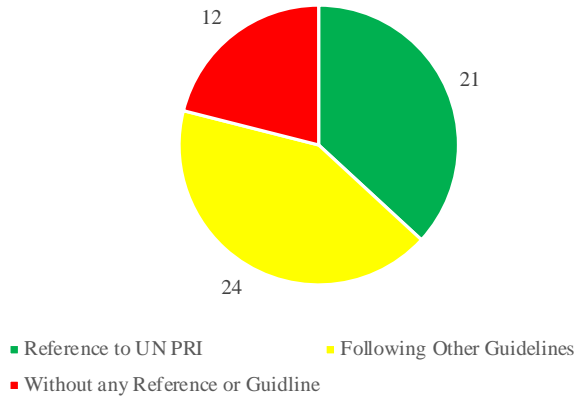
39 out of the 74 managers that pursue PE are signatories, of which 20 only invest into PE and the rest in other alternative asset classes, too. 14 of the 30 RE managers are signatories, of which all of them pursue other asset strategies as well. 26 out of the 34 Infra firms have signed the principles, of which 14 do not invest in any other asset class. 17 out of 34 PD managers are signatories, of which only 2 invest in PD only. 15 out of 29 firms that invest in VC have signed the principles, but except for 1 company they all pursue other investment strategies.

Chart 12: Researched UN PRI Signatories by Asset Class



Most signatories of the UN PRI are investing in more than just a single asset class. Rather than focusing only on one strategy, diversification increases the probability to adhere to the principles. That the vast majority of Infra managers have signed them is not surprising, as investing into energy, transport and logistics, environmental, telecom and social sectors is ESG related per se. Out of those 57 asset managers who have not signed the UN PRI so far, 21 make reference to them or the SDGs. Except for one company from Germany and one from Sweden, all of them are located in the USA and one in Canada. 24 of the researched PE and other alternative asset managers have signed or adhere to other guidelines or initiatives, of which only 2 have not signed the UN PRI but make reference to them or the SDGs. Out of these other guidelines or initiatives no one has more than eight supporters. 12 do not adhere to any guidelines or initiatives at all. The UN PRI are therefore the leading network for PE and other alternative investors in relation to ESG.

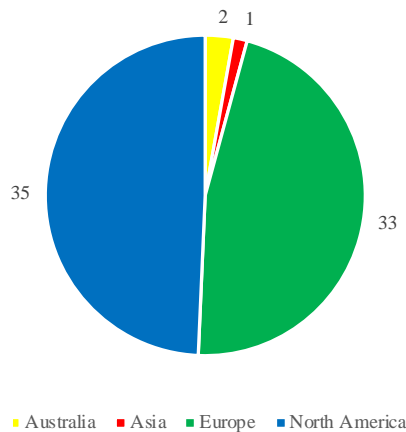
Chart 13: Reference to UN PRI and Other Guidelines



4.1.3. Publicly Available Information

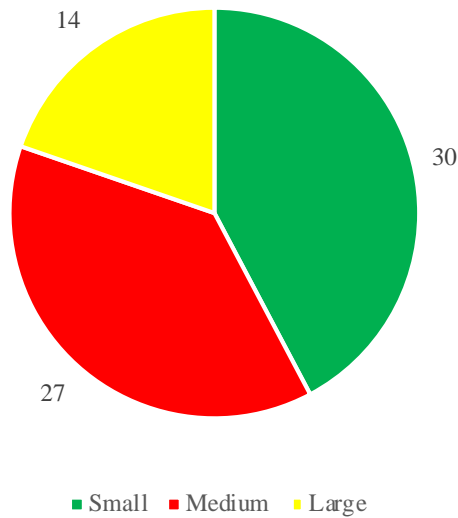
All of the 117 asset managers have a website that informs amongst others about what they do, their investment strategy, their team, and where their offices are located. Some of them share their investment philosophy and values. 71 firms mention their commitment to ESG, some at length and others just in a few words, which is a higher number than the researched signatories of the UN PRI. And all of them, although they sometimes give different names to it like sustainability or responsibility approach, cover all three pillars of ESG, but the term ESG as such is used by the vast majority. However, addressing ESG does not necessarily cause asset managers to become a signatory. Out of these companies 2 are from Australia, 1 from China, 33 are from Europe, and 35 from the North America. Again, all Australian investors are represented, and the majority of the European managers as well. Out of the 35 North American entities, 3 are located in Canada.

Chart 14: Public Disclosure of ESG Overall



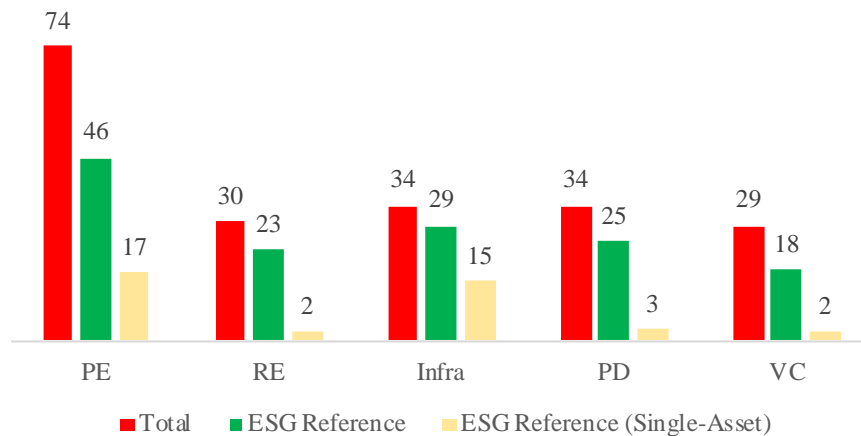
30 PE and other alternative managers are small ones, which is almost 50%, 27 are mid-size, and all 14 large ones mention ESG on their website. Considering that the size does not have any effect on signing the UN PRI, this finding might just follow from the fact that smaller companies just not care for their websites as bigger ones do.

Chart 15: Public Information by Size



46 PE managers mention ESG on their website, of which 17 pursue only this strategy. In RE, the proportion is 23 to 2, in Infra 29 to 15, in PD 25 to 3, and in VC 18 to 2. Again, most of the companies that publish their commitment are investing in more than just a single asset class, and the percentage of Infra firms is the highest of all, most likely due to their exposure to ESG.

Chart 16: Disclosure by Asset Class

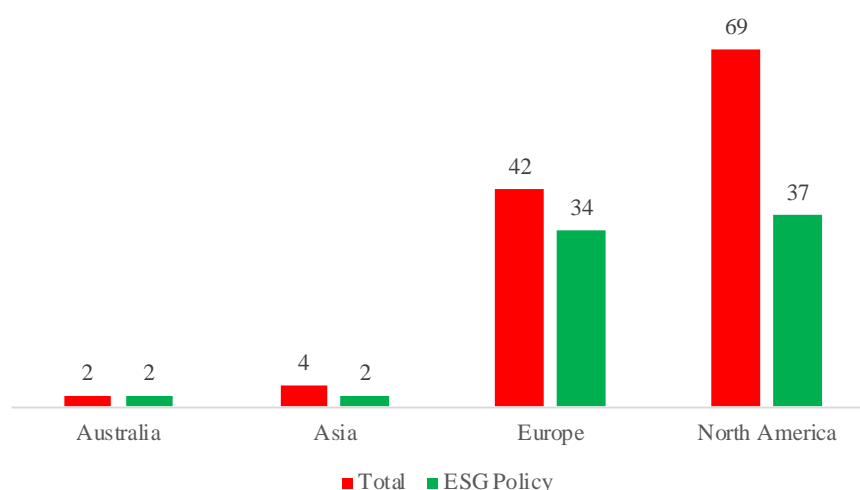


4.1.4. ESG Policies

The next step to find out what PE and other alternative managers have accomplished so far in relation to ESG is to analyze how many and what firms have yet set up their own ESG policy. In total, 75 asset managers have put in place such a policy, compared to the 60 signatories of the UN PRI. The number is even higher than the 71 firms that mention their engagement on their website. ESG commitment does not necessarily come along with agreeing to guidelines or frameworks set up by others or public statements. And again, anytime all three ESG pillars are mentioned even if a few documents are called sustainability or responsibility policy.

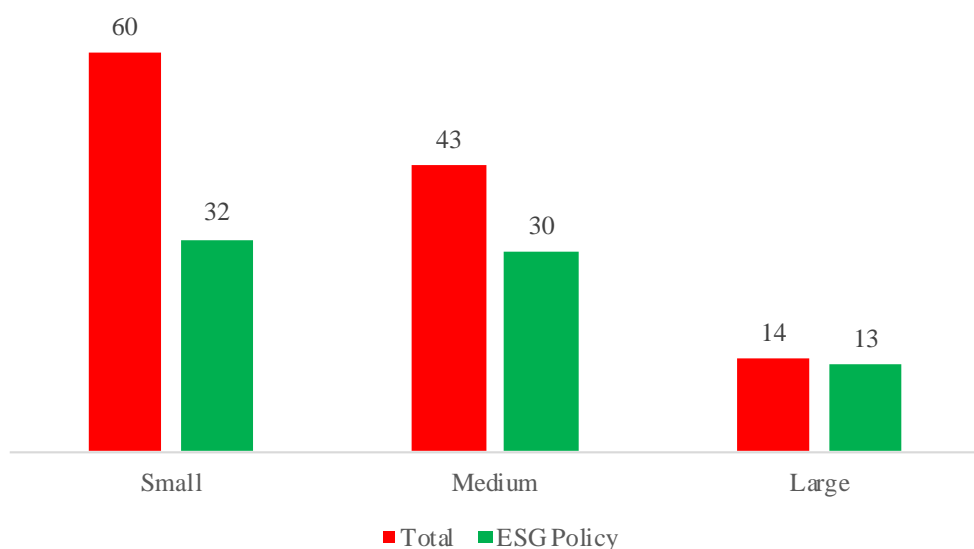
Both Australian alternative managers have a policy, 2 from China, 34 from Europe, and 37 headquartered in North America, including all 4 companies from Canada. As already observed, Australian and Canadian firms are leading, and the commitment of European managers is much stronger than the one of US companies.

Chart 17: ESG Policies by Region



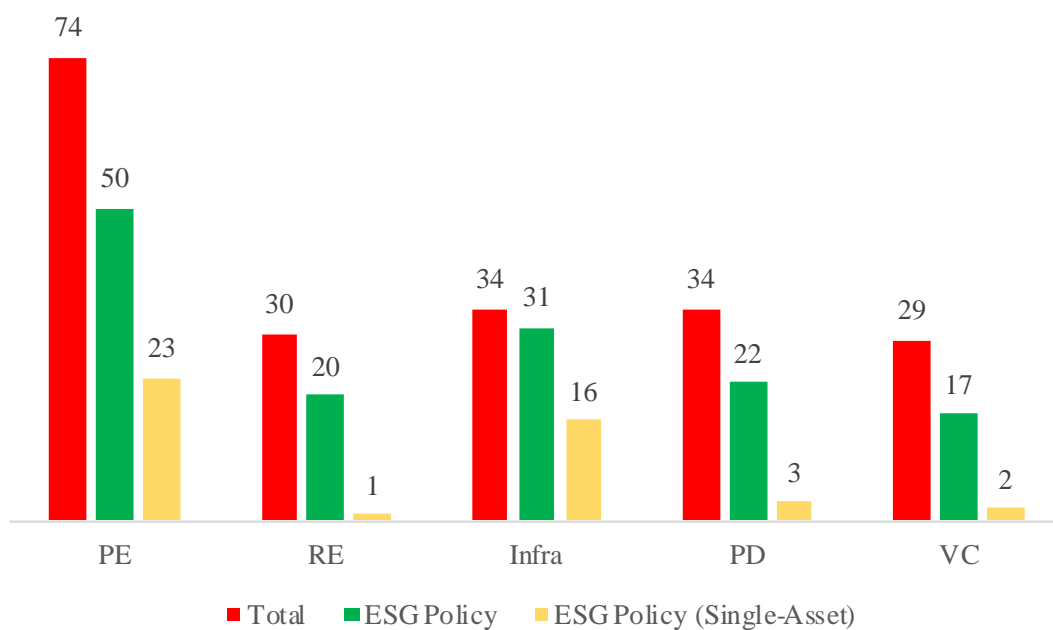
32 out of 60 small managers have set up an ESG policy, 30 out of 43 mid-size ones but 13 out 14 large ones did. When it comes to word an engagement, size does have an effect. Even though the extent and the granularity of the policies vary from just a single page to detailed and sophisticated concepts, setting them up is associated with costs and requires skilled personnel or external advice. Smaller asset managers are most likely afraid of this cost-intensive and labor-intensive process and rather go the easy way of just signing the UN PRI.

Chart 18: ESG Policies by Size



50 PE managers have an ESG policy, of which 23 pursue only a PE strategy. In RE, the proportion is 20 to 1, in Infra 31 to 16, in PD 22 to 3, and in VC 17 to 2. It is reconfirmed that it is more likely that multi asset class managers formulate their commitment and that firms that pursue Infra are more engaged.

Chart 19: ESG Policy by Asset Class



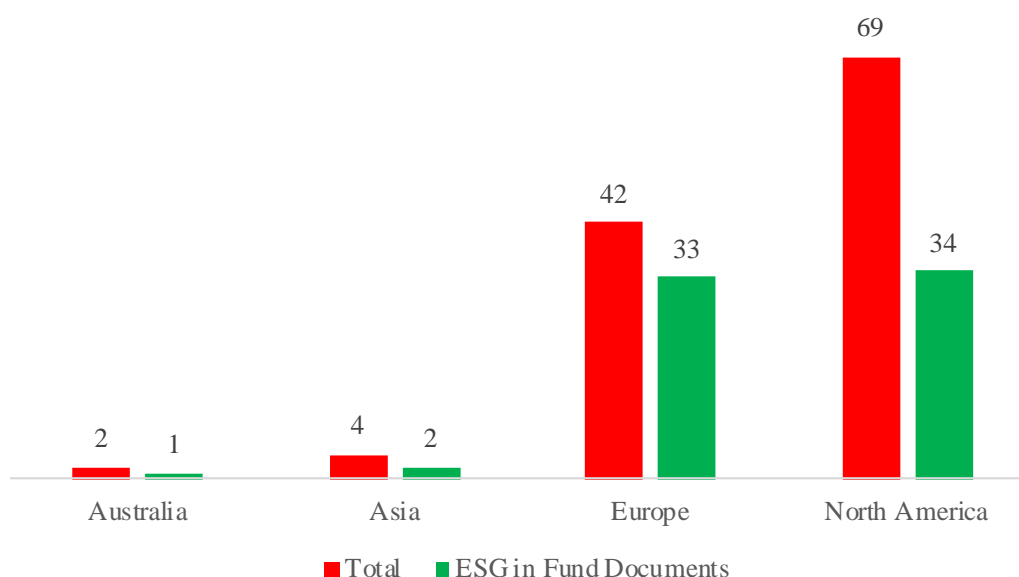
4.1.5. Fund Documents

Considering that the LPA is stipulating the structure of the funds and the nature as well as the extent of the relationship between the asset manager as GP and the investors as LPs, the PPMs and side letters give a fair view on the ESG considerations of PE and other alternative asset managers, as they are the essential documents highlighting the investment process or restrictions. PPMs and side letters are binding for the GPs, and if ESG considerations are mentioned, they must be followed.

In order to find out what PE and other alternative asset managers have accomplished so far in relation to ESG, such fund documents really and truly provide the best view. 70 asset managers mention their ESG commitment in their fund documents. This is a higher number than the 60 signatories of the UN PRI, and even 71 companies have referred to ESG on their website. And same as for the mentioning on the websites and in policies, if an approach is stipulated, all three ESG pillars are covered.

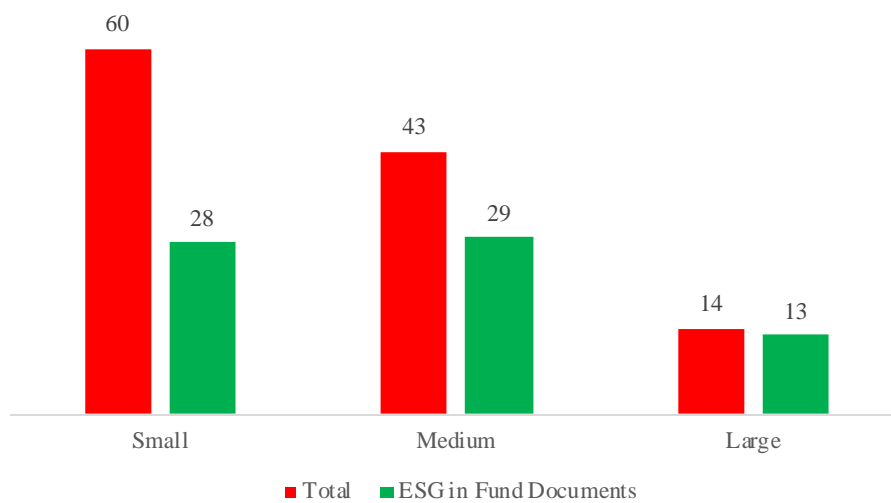
1 out of 2 asset managers from Australia stipulate ESG efforts in their fund documents, 2 out of 4 from China do it, 33 out of 42 European firms, but only 34 out of 69 are headquartered in North America, of which 3 are from Canada. The binding commitment from Australian and European PE and other alternative managers is again much higher as from those located in China and North America.

Chart 20: ESG Fund Documents by Region



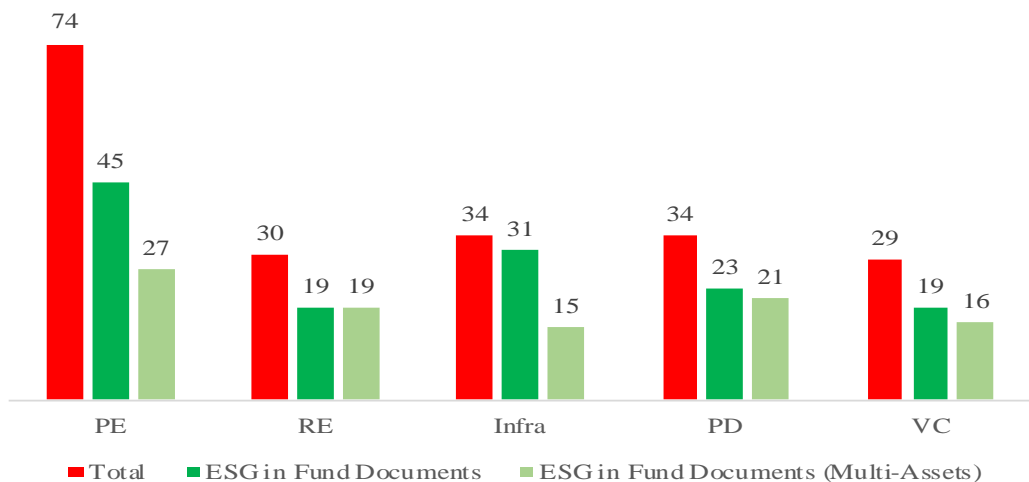
28 out of the 60 small asset managers mention ESG in their fund documents, 29 out of the 43 mid-size ones, and 13 out 14 large ones. What counts for setting up an ESG policy also applies for the implementing ESG in fund documents. Smaller managers do not do it to the extent larger ones do it, most likely because they want to avoid the costs and do not have the human resources.

Chart 21: ESG Fund Documents by Size



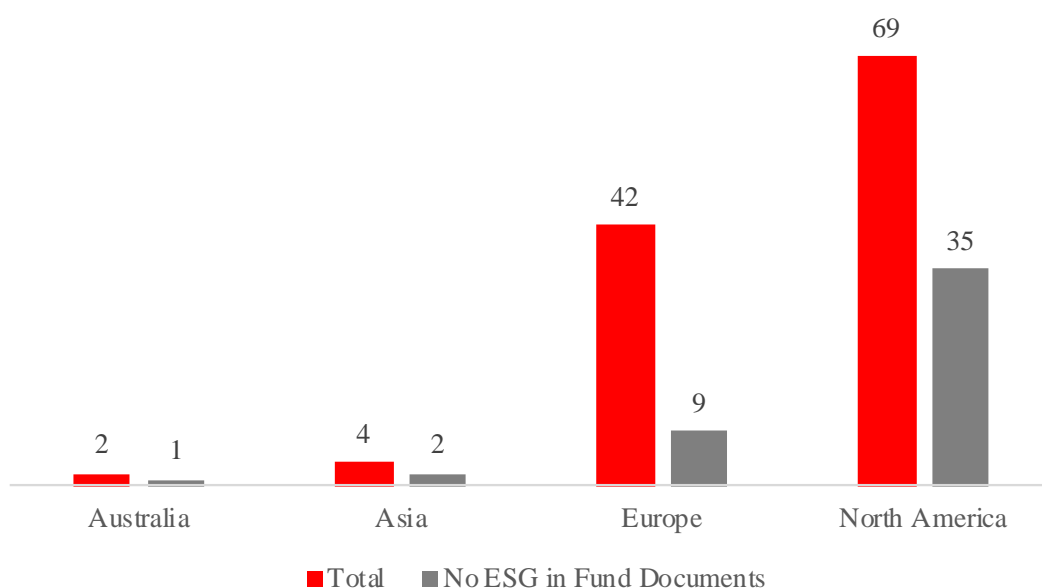
45 invest in PE, while 27 of them also pursue other strategies. All of the 19 RE managers seek also for other opportunities. 15 of the 31 Infra firms are single asset managers. 21 of the 23 PD companies look for other investments, and 16 of the 19 VC houses do the same.

Chart 22: ESG Fund Documents by Asset Class



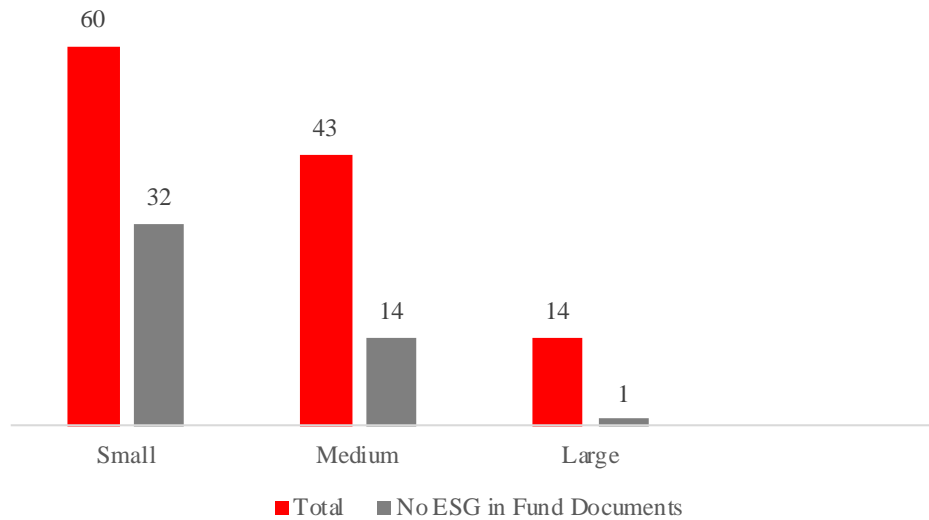
Beyond that, potential anomalies can be found by analyzing what PE and other alternative managers do not do and do not put down on paper or do one thing but not the other. Out of the 47 investment firms that do not mention ESG in their fund documents, 11 are signatories to the UN PRI. With one exception of a mid-size firm, all of them are small asset managers coming from all regions. Four of these companies, one is again a medium-sized firm, claim on their website that ESG is part of their business practice, which then can be considered as greenwashing. Eight of them have a policy in place, but even such a written document does not lead automatically to a binding commitment. In total, 10 asset managers claim the same on their website, but do not have it in their fund documents. The same applies to the 11 firms that also have a policy set up. Two managers from the USA, a large one and mid-size one, even state on their website that they perform an ESG screening before they make investments, and one of them says that they would introduce ESG measures during the investment holding period. One small firm from Canada and another small one from Switzerland mention an ESG screening just in their policy. But as ESG is not part of their fund documents, they are therefore not bound to it. Consequently, it is more a declaration of intent rather than a real commitment. Classified by region, 1 asset manager from Australia, 2 from China, 9 from Europe, and 35 from North America do not mention ESG in their fund documents.

Chart 23: No ESG Fund Documents by Region



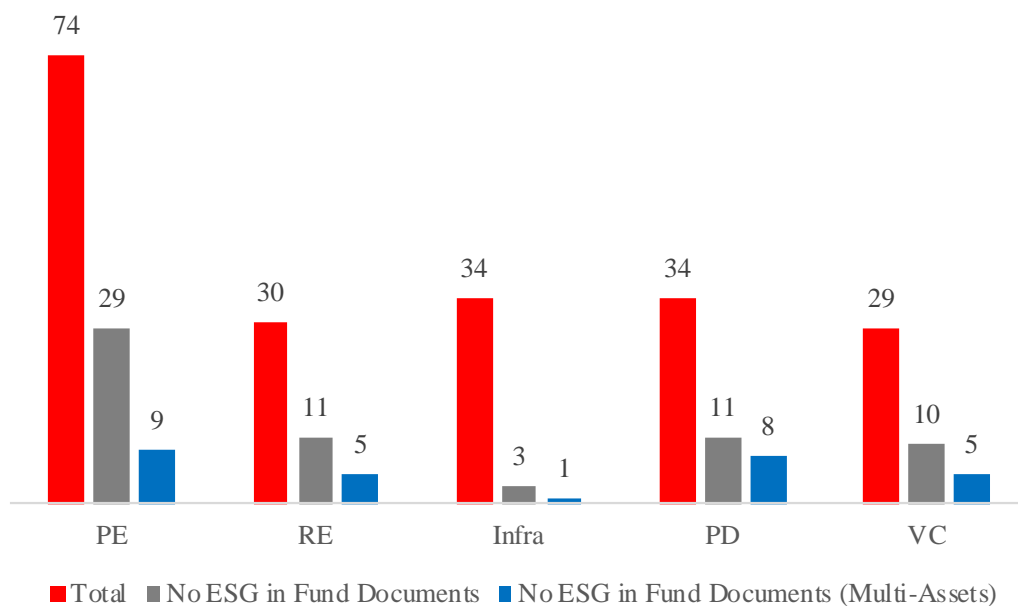
32 firms are considered as small, 14 as medium-sized, and only a single one is a large asset manager.

Chart 24: No ESG Fund Documents by Size



29 companies pursue PE, but only 9 are multi-asset managers, 11 do RE of which 5 invest in other asset classes as well, only 3 look for Infra including 1 firm that has more than a single investment approach, 11 pursue PD of which 8 are multi-asset managers, and 10 do VC including 5 companies that look for other strategies, too

Chart 25: No ESG Fund Documents by Asset Class



Two side effects of ESG were found in the fund documents as well as in the quarterly and annual reports PE and other alternative firms provide to their investors, which is an interesting aspect that affects the industry and their investments, in particular. According to valuations found in such reports, 18 firms reported that recently a price premium has been paid to acquire target companies with recognized high sustainability. Even higher prices were paid for ESG champions. Purchase prices were found representing up to 3.2x sales, 28x EBITDA, and 57x net income. 14 of these companies are from the USA, 12 medium-sized and 2 large ones, and 4 from Europe, all mid-size.

In addition, the implementation of ESG practices did not lead to higher management fees of the asset managers. The opposite was found. Since a few years investors in general expect lower fees and exert pressure on the asset managers, which, in particular, is the case the bigger the funds are¹⁹⁵, and those are the ones that are more advanced in relation to ESG. LPs just expect the industry to become or to be compliant, and they are not willing to pay for it¹⁹⁶.

But even if sustainable and responsible investing is desirable, the key barrier that inhibits the widespread adoption of a sustainable investing approach is still the absence of commonly agreed standard and measurement, and lack of a formal approach, although certain frameworks, initiatives and guidelines exist, which makes it difficult for asset managers to formulize their ESG approach, as they vary significantly.

4.1.6. Improvements

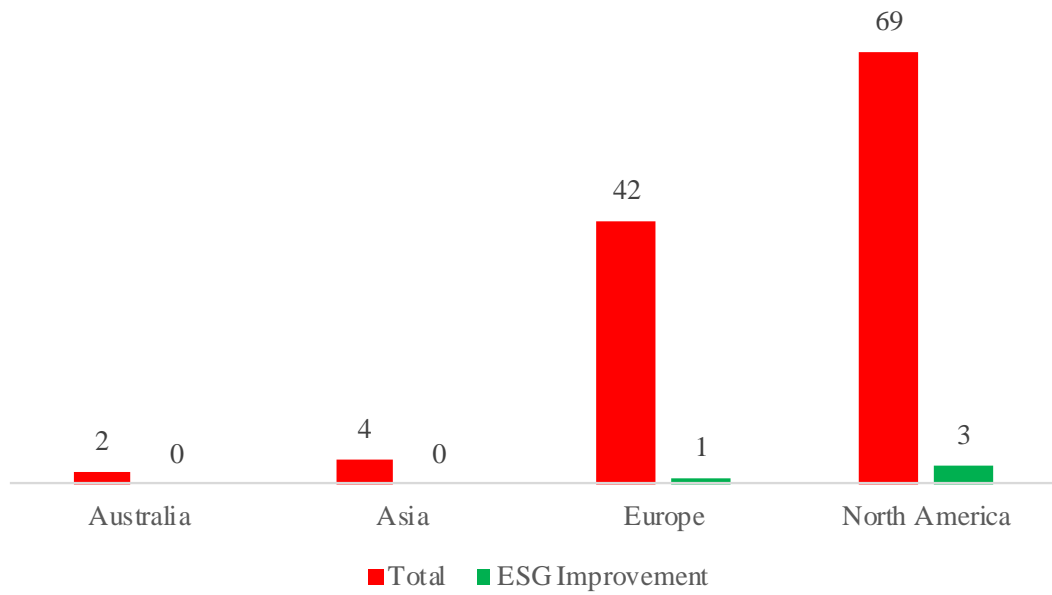
The alternative industry is not only known for making their investments quickly but also for the prompt adaption of new matters of every kind. It is in general a fast-changing environment, and the same applies to the implementation of ESG. The thesis at hand was approached in October 2018, and improvements what PE and other alternative asset managers have accomplished were studied until the end of 2019.

During this period, four asset managers signed the UN PRI, three are from the USA, and one is from Europe.

¹⁹⁵ <https://www.penews.com/articles/the-2-management-fee-falls-from-favour-20180716>

¹⁹⁶ <https://www.privateequityinternational.com/lps-consider-fair-management-fee/>

Chart 26: ESG Improvements by Region



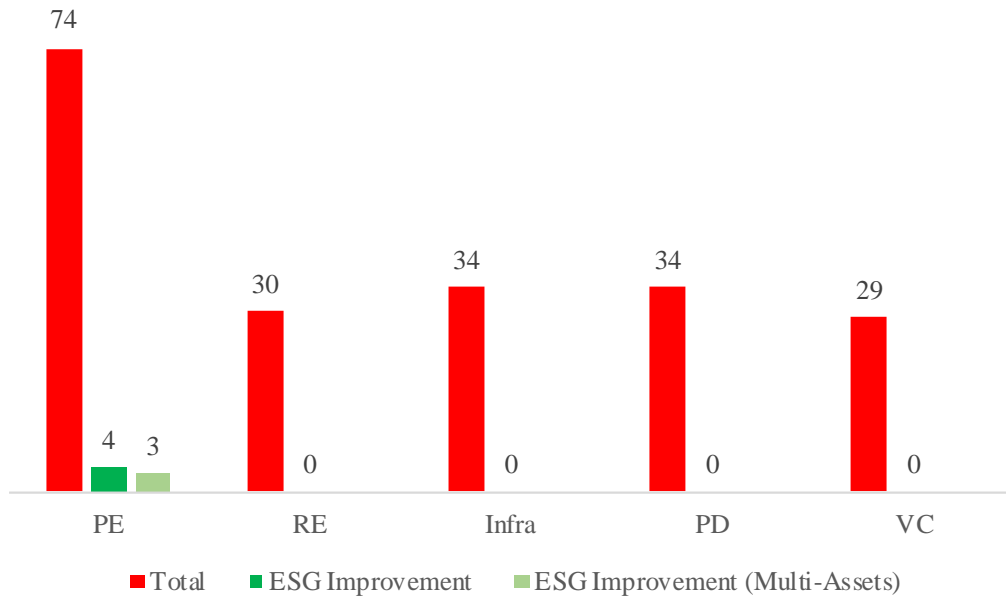
Three small ones and a medium sized one improved their efforts.

Chart 27: ESG Improvements by Size



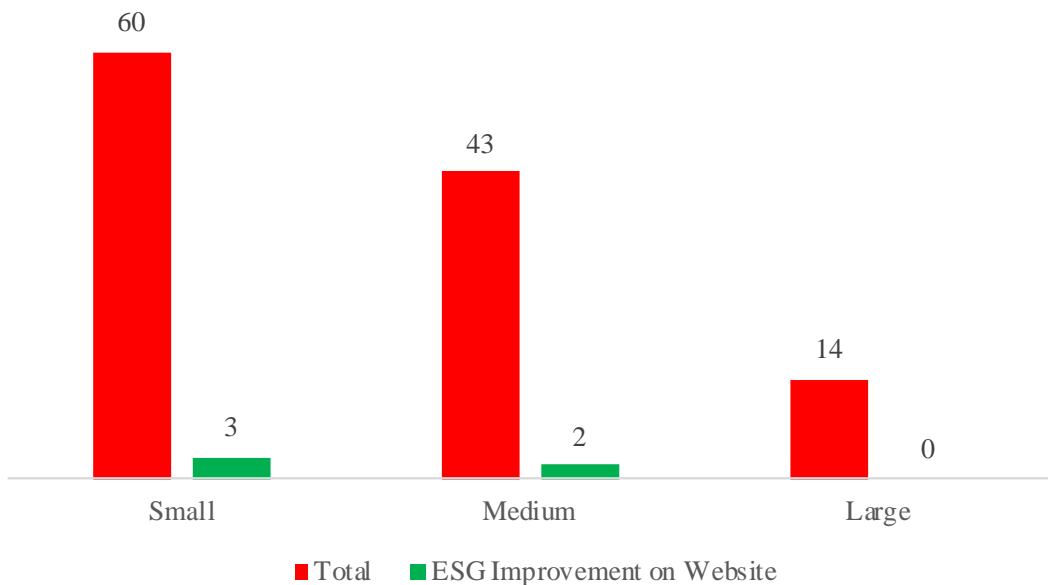
All four invest in PE, and three of them invest in other asset classes as well.

Chart 28: ESG Improvements by Asset Class



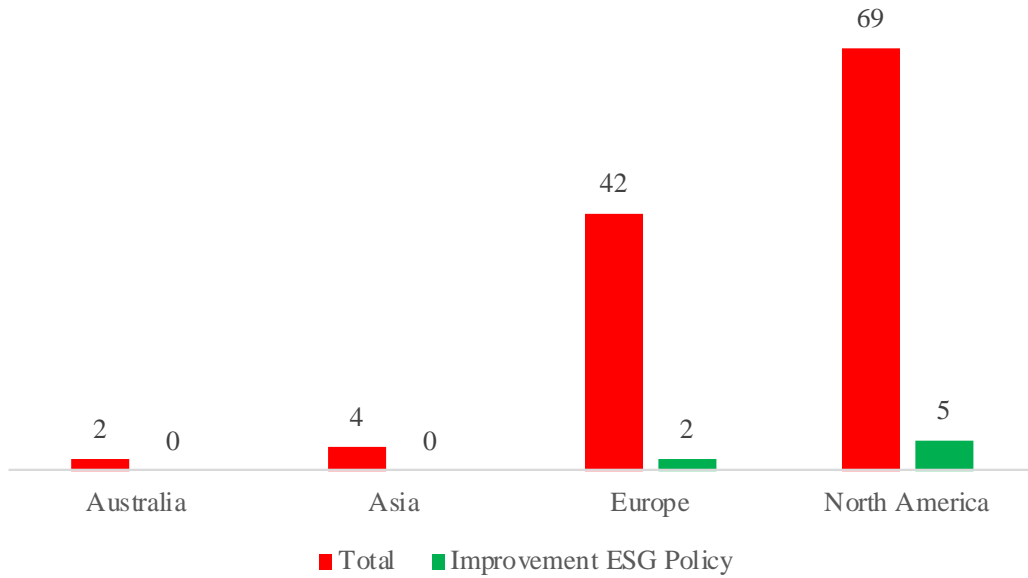
Five firms have put their ESG efforts on their website. Four of them are the above-mentioned new signatories to the UN PRI, and the fifth one is a medium sized multi-asset manager from the USA.

Chart 29: ESG Website Improvements



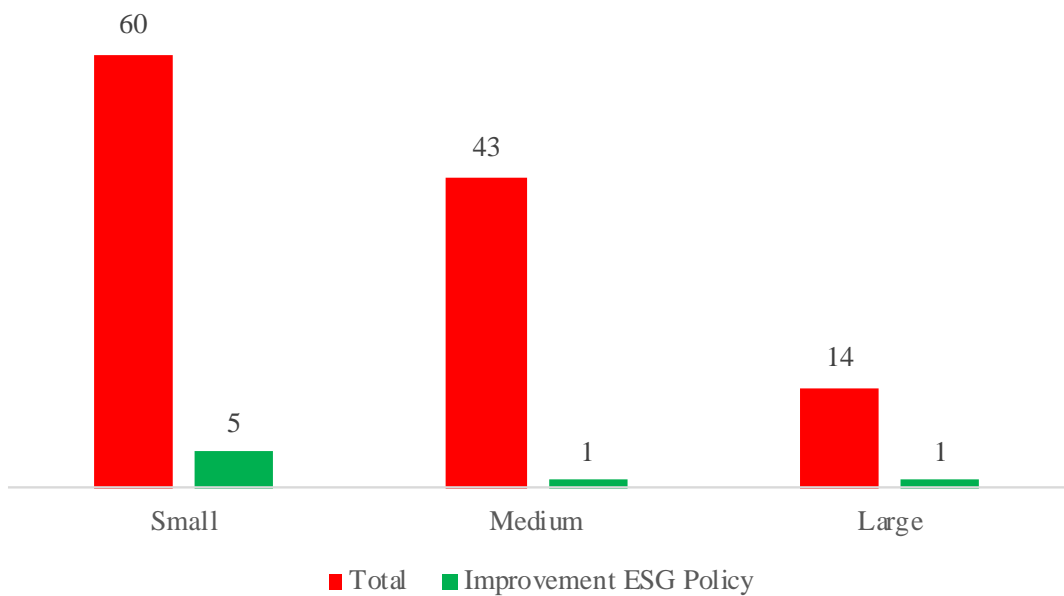
Seven companies have set up an ESG policy. Five are from the USA and two are headquartered In Europe.

Chart 30: ESG Policy Improvements by Region



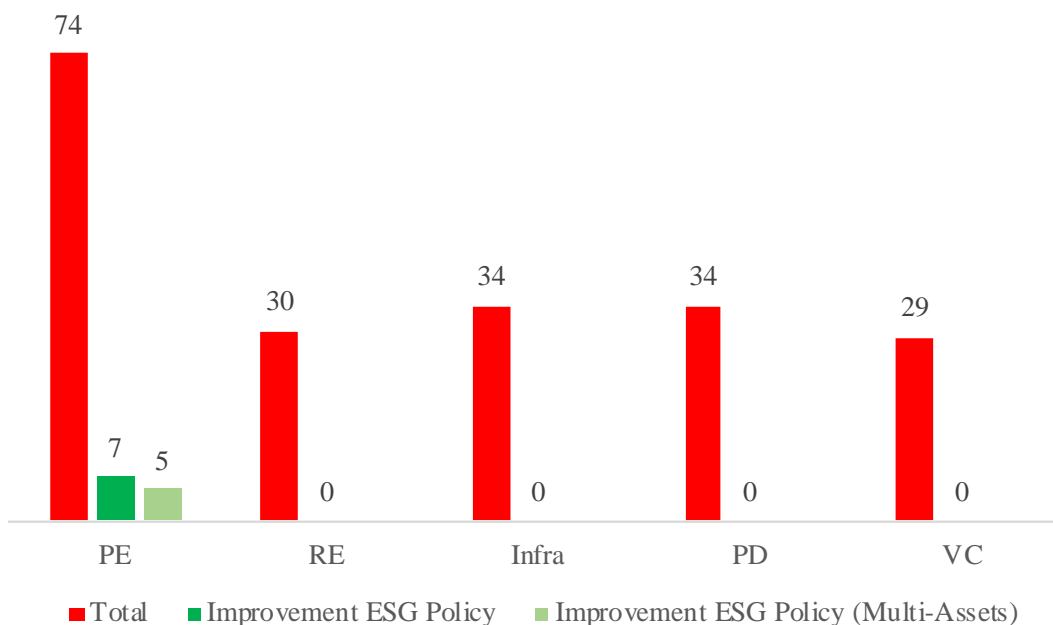
Five are small firms, one medium sized and one a large one.

Chart 31: ESG Policy Improvements by Size



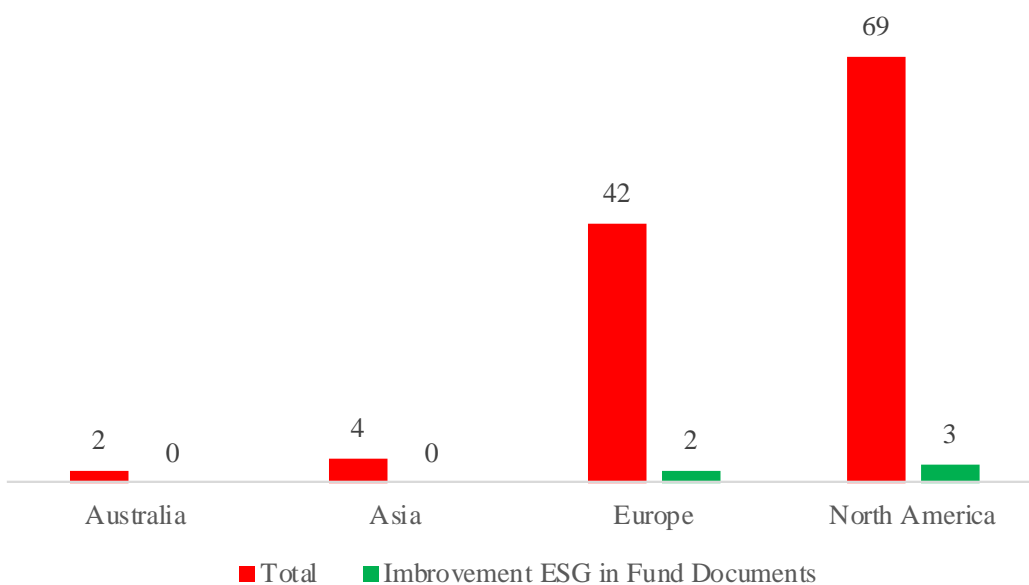
Two only invest in PE, and the others in other asset classes as well.

Chart 32: ESG Policy Improvements by Asset Class



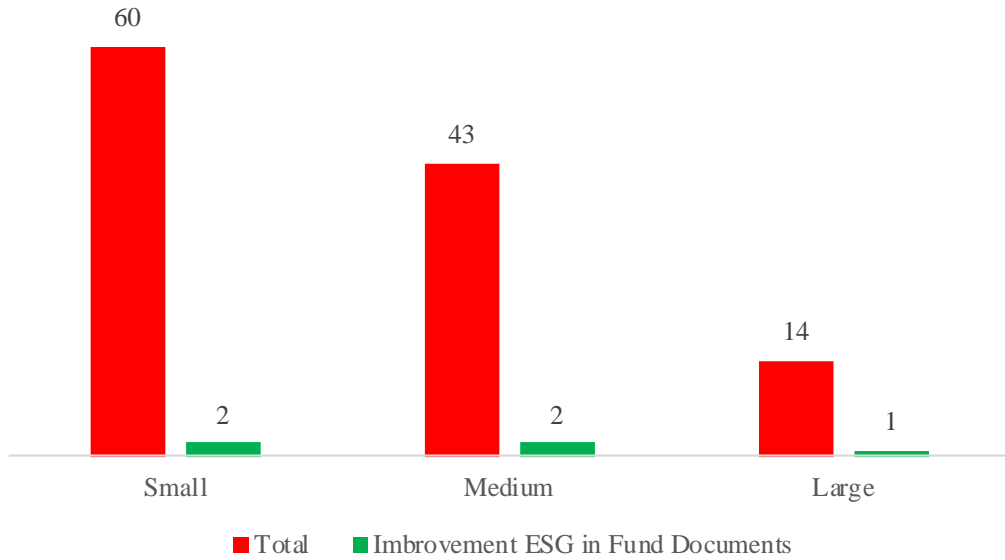
Five companies have added their ESG approach to their PPM or concedes their investors to adhere to it in their side letters. Three of them are from the USA and two from Europe.

Chart 33: Improved Fund Documents by Region



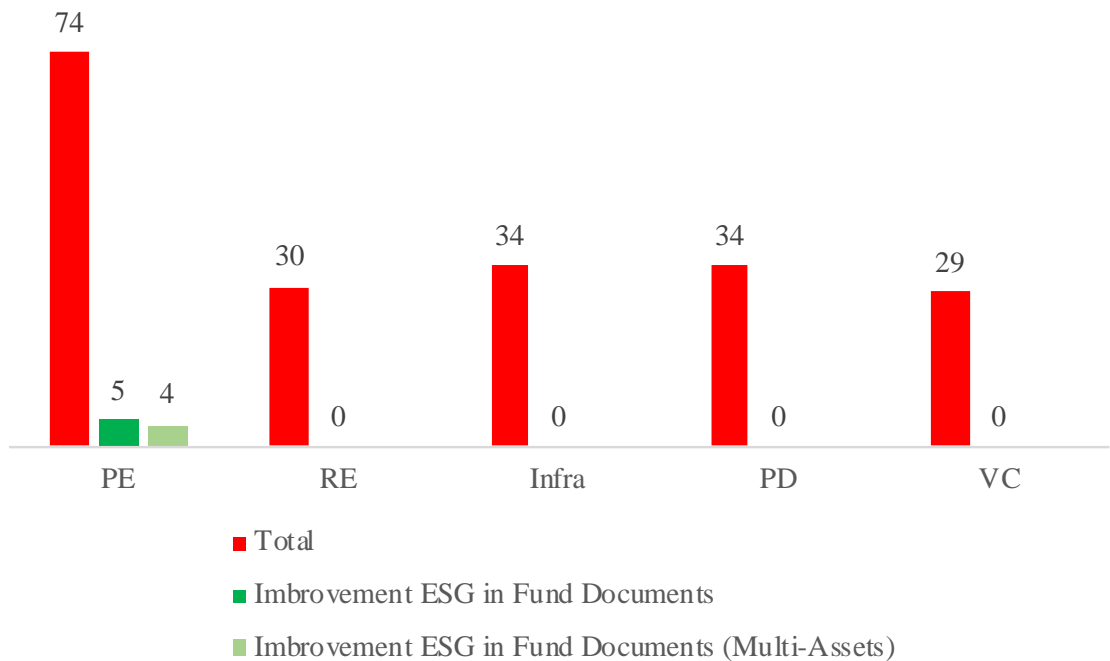
Two of the companies are small, two medium sized and one large one.

Chart 34: Improved Fund Documents by Size



All of them invest in PE, but four are multi-asset managers.

Chart 35: Improved Fund Documents by Asset Class



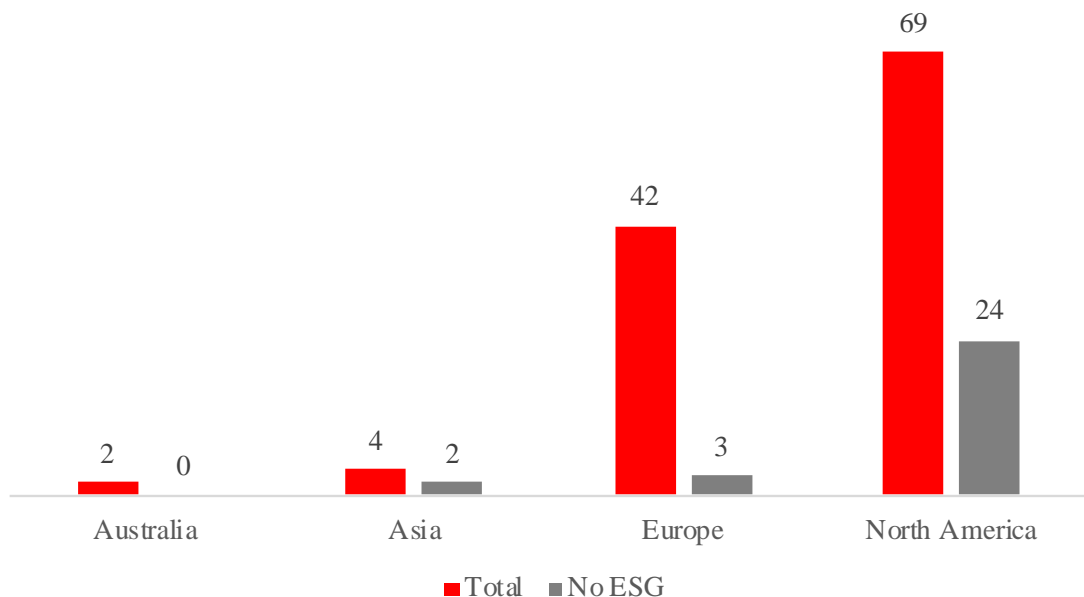
4.2. The Points-Based-System

In order to find out how much PE and other alternative managers have accomplished so far in relation to ESG, and how strong the commitment of the industry is, a seven-stage points-based system has been set up from 0 = not existent to 6 = very strong. With this, it can be evaluated how advanced the overall industry exactly is, if differences exist for example in relation to regions, sizes, and asset classes.

4.2.1. Reference to ESG

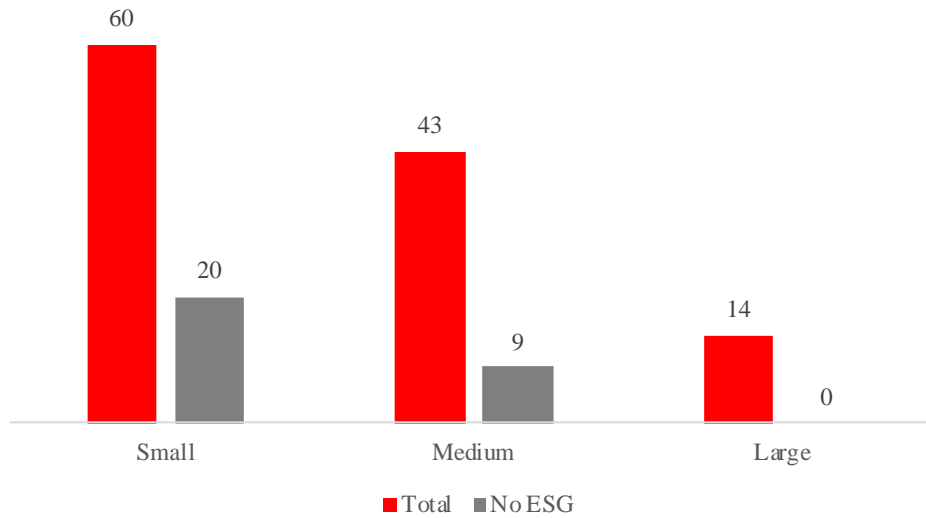
No point has been given to 29 asset managers, as they do not mention ESG at all on the company's website, they are not a signatory to any framework, initiatives or guidelines, ESG is not part of any of the binding fund documents, they do not screen investments at all or analyze it in the DD process, and consequently red flags would not stop entering into an acquisition, they would not utilize shareholder activism to enhance ESG, and no ESG efforts are measured and reported. 2 of them are headquartered in China, 3 in Europe and 24 in North America.

Chart 36: No ESG by Region



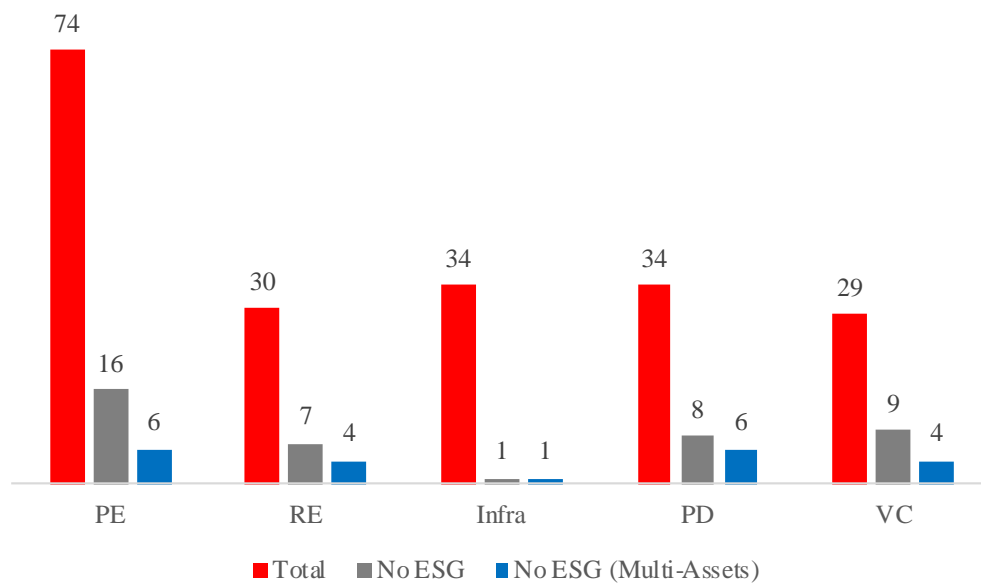
20 of them are small firms and the rest are medium-sized ones.

Chart 37: No ESG by Size



6 firms are multi-class PE managers, and 10 pursue only PE. Three invest only in RE, while the other four RE managers look for other asset classes, too. Only a single multi-asset company that has an Infra strategy is receiving no point at all. Eight PD firms do not score, and six of them pursue other investments, too. Nine firms investing into VC are with zero points of which four look for other asset classes.

Chart 38: No ESG by Asset Class

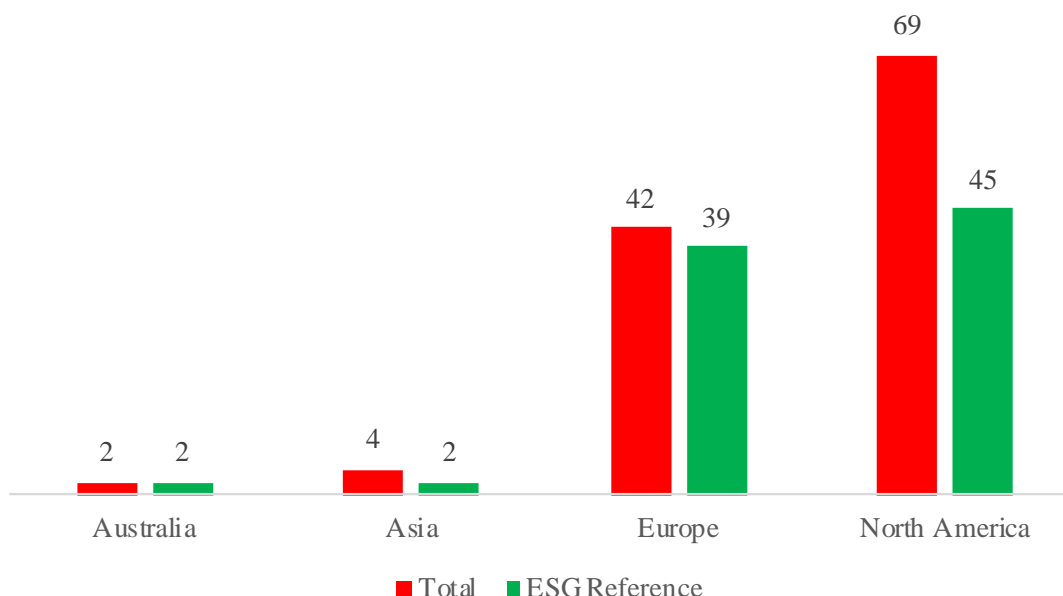


However, it was also noted that 9 out of the 29 asset managers that do not refer to ESG in any way, have a philanthropic approach and are engaged in corporate citizenship (CC) that refers to a company's responsibility towards society and includes amongst other charitable goals and social involvement or welfare¹⁹⁷. Amongst others, they have entrepreneurship initiatives, support their communities, provide volunteer projects of their employees, have set up mentoring programs, provide non-profit and pro bono services, and support veterans.

The interesting fact that was observed is that all such firms are headquartered in the USA, and the same counts for 10 other asset managers that have a CC approach in addition to a more advanced one in relation to ESG, which is altogether almost a third of all US companies. 12 of such companies even have a dedicated CC policy in place that details their engagement.

88 asset managers receive a point for referring to ESG. 2 of them are from Australia, 2 of them from China, 39 from Europe, and 45 from North America, including 4 from Canada.

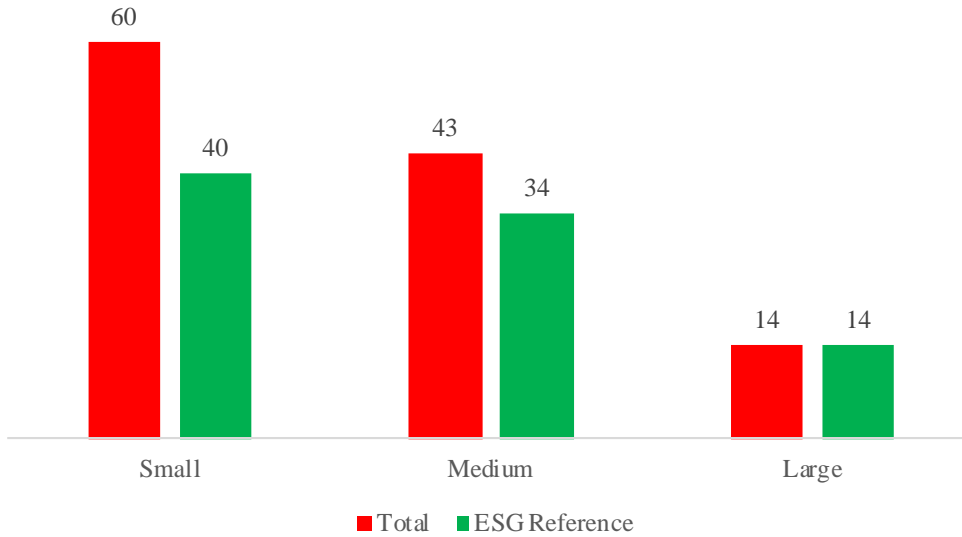
Chart 39: ESG Reference by Region



¹⁹⁷ Matten D., Crane A. (2005)

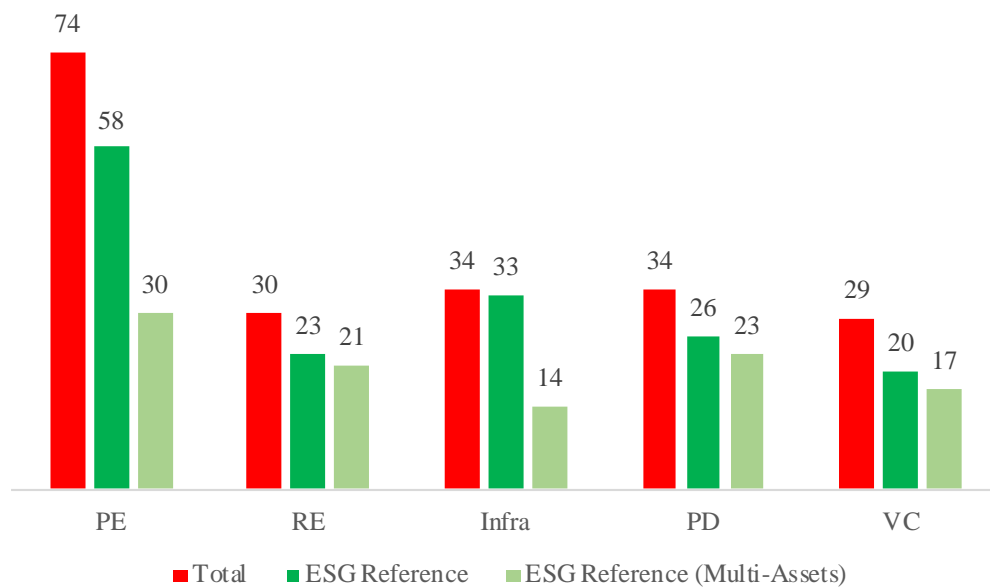
40 are small asset managers, 34 medium-sized ones, and all 14 large ones score as well.

Chart 40: ESG Reference by Size



Amongst them are 58 PE managers of which 30 look for other asset classes, too. Out of the 23 RE firms, 21 invest in other strategies. 14 of the 33 Infra companies that score pursue other investments. 26 PD managers receive a first point of which 23 invest in other asset classes. 17 out of the 20 firms investing into VC and also look for other strategies.

Chart 41: ESG Reference by Asset Class

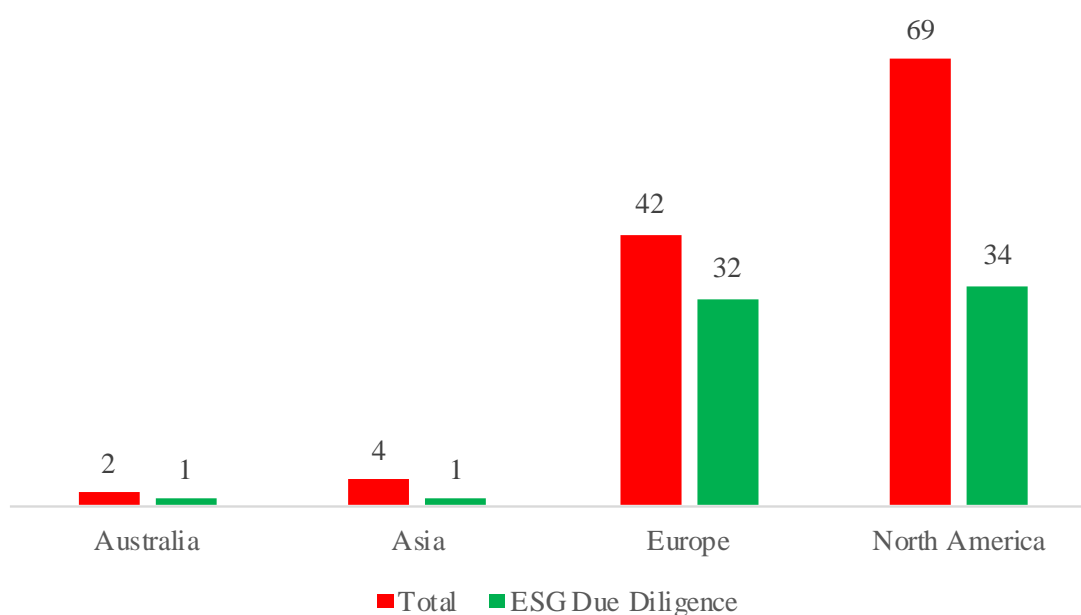


Hence, it can then be considered that mainly for small asset managers from North America ESG is not of interest so far, or at least that the firms have not yet set up their approach to ESG, which can be caused by the lack of skilled people or by the associated costs. Alternative asset companies are in general lean organizations and take care of the assets with a manageable amount of staff compared to the size of the assets. Costs would also apply if such firms would source external advice for their ESG engagement. Infra is again proven to be an ESG oriented asset class, which is justified by the nature of this strategy and pursuing more than a single investment opportunity increases the likelihood that ESG is part of the business.

4.2.2. ESG Due Diligence

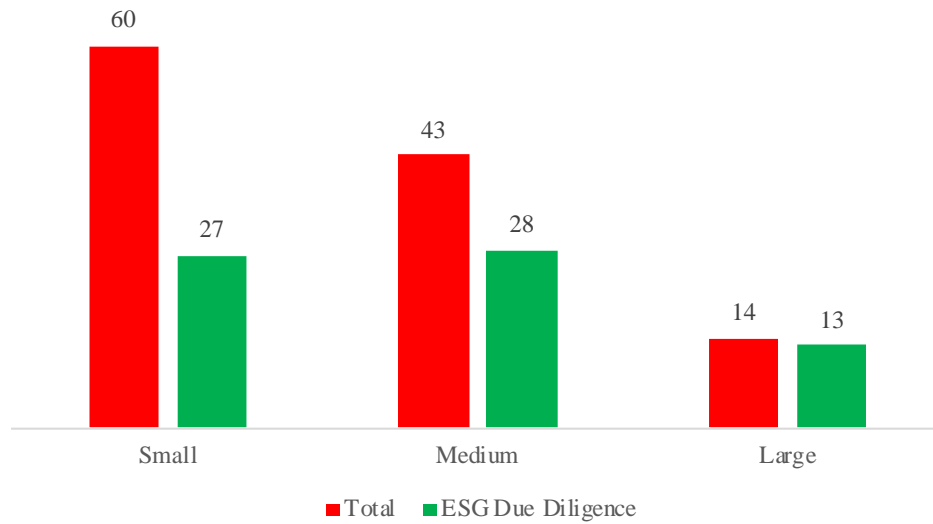
68 PE and other alternative asset managers receive another point, as they have a more comprehensive commitment to sustainability and responsibility and mention ESG as an integrated part of their investment process. They evaluate the ESG compliance of their potential target companies during the DD. 1 firm is from Australia, 1 from China, 32 from Europe, and 34 from North America including 3 from Canada.

Chart 42: ESG Investment Process by Region



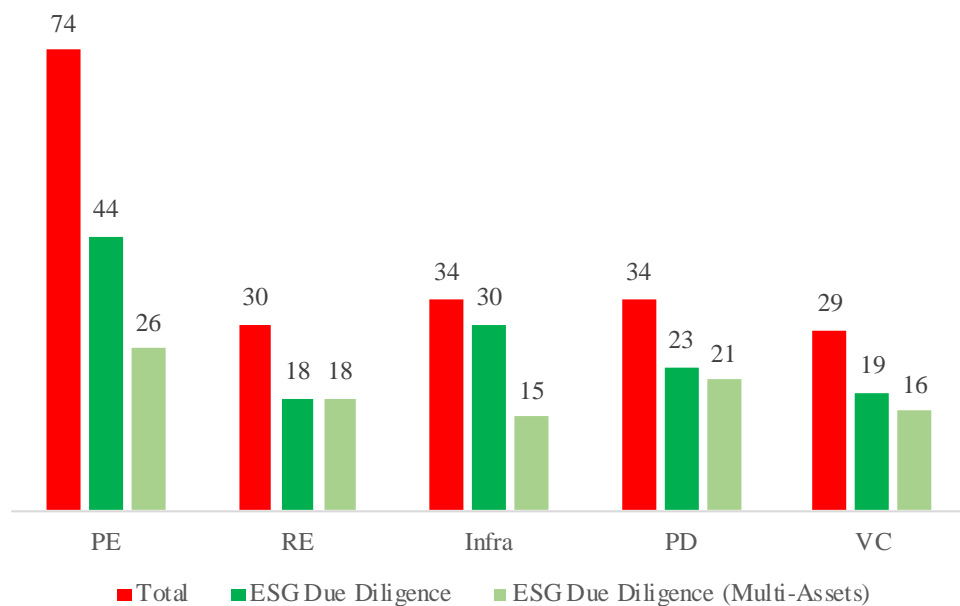
27 are small asset managers, 28 are medium-size ones, and 13 out of the 14 large one's score.

Chart 43: ESG Investment Process by Size



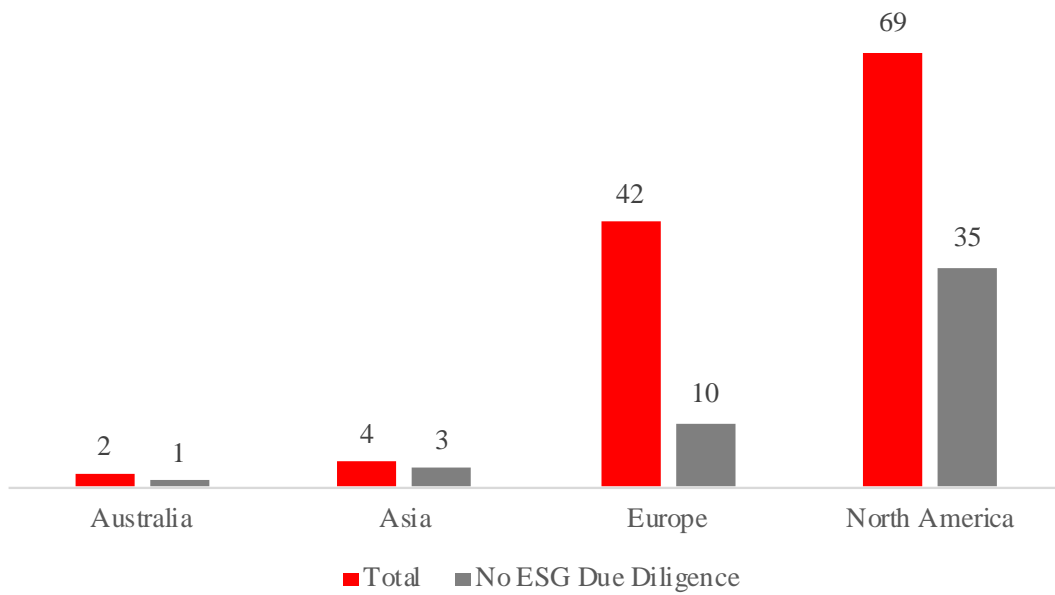
Out of the 44 companies that do PE, 26 pursue other investments. All 18 RE firms invest in other asset classes. 15 of the 30 Infra managers look for other strategies, too. 23 PD companies score of which 21 invest in other asset classes. 16 out of the 19 firms that invest in VC look for other strategies.

Chart 44: ESG Investment Process by Asset Class



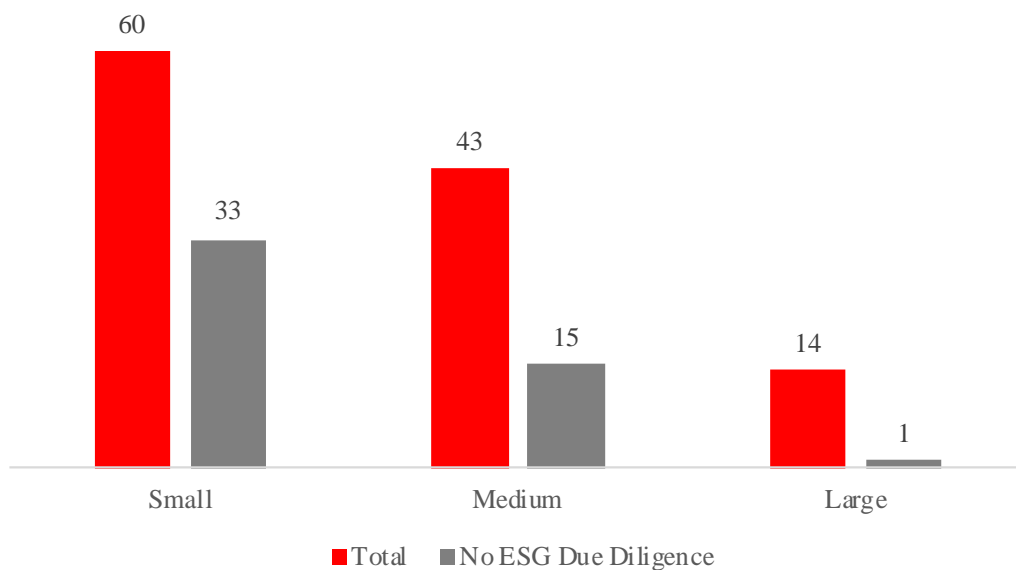
In return, 49 of the researched sample does not consider ESG being part of their DD process. 1 from Australia, 3 from China, 10 from Europe, and 35 from North America including 1 from Canada.

Chart 45: No ESG Investment Process by Region



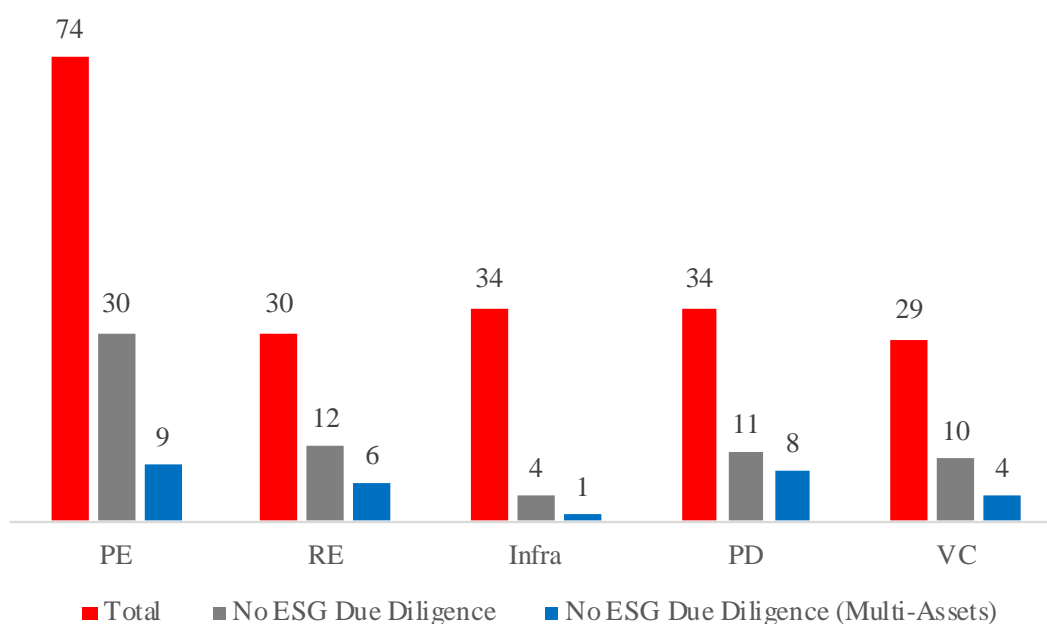
33 are small firms, 15 are mid-size ones, and only a single large company does not score.

Chart 46: No ESG Investment Process by Size



Out of the 30 firms that do PE only 9 look for other investments. 6 of the 12 RE managers pursue different strategies. Only one out of the four Infra firms invests in other asset classes. 11 PD managers do not score of which 8 seek for different investments, too, but out of 10 VC firms, only 4 are multi-class asset managers.

Chart 47: No ESG Investment Process by Asset Class



Conducting DD certainly takes time and adding another layer of ESG in addition to a financial, legal, tax, commercial and maybe more assessments, does increase the costs and takes time. In doing so, it does not matter if the firms use external advice or even train or recruit inhouse staff for the job. The latter can actually be pricier.

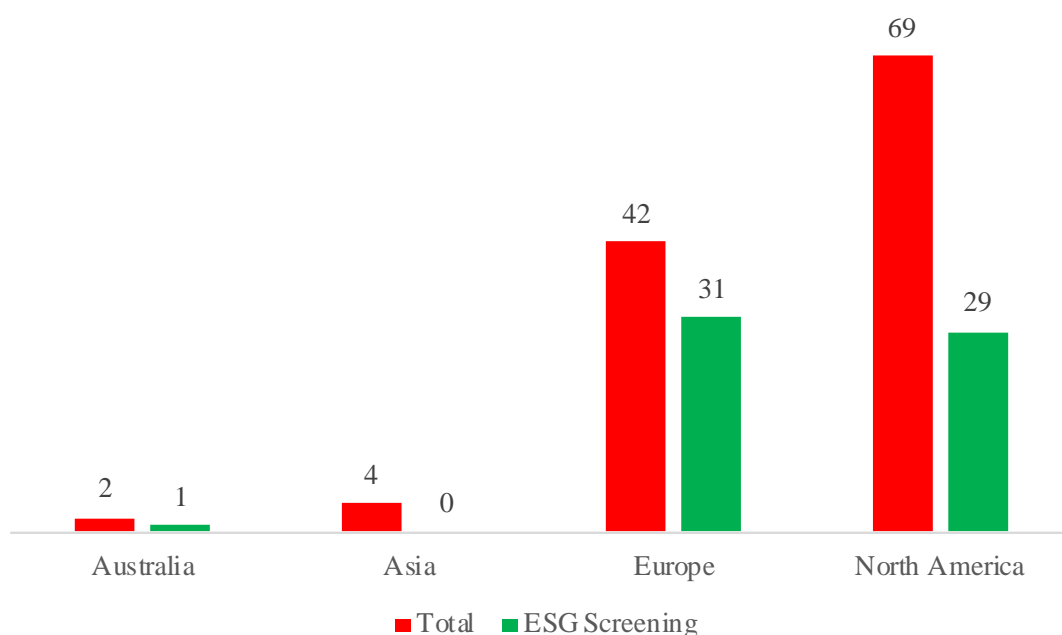
4.2.3. ESG Screening

ESG DD can on the one hand side be considered as a kind of risk assessment that shall show what the asset managers shall take care of once they have taken over the active ownership. In such cases, the DD findings are not considered as a deal-breaker but merely as a field for improvement. A third point is therefore awarded to such firms that analyze ESG criteria on fund level by not considering certain types of investments via a screening like industries that are affected by pollution, child labor or deal with pornography or weapons of war, which could be caused by investor demand and by their own restrictions in what sectors they can invest into.

It was already mentioned that, in particular, negative screening can potentially cause problems, as it can restrict investment decision greatly and therefore exclude many companies. The example of a company was referred to that has developed a software for website presences, which was then used by the Playboy magazine. One could question if the Playboy magazine is considered as pornography, and if all the other customers the software company has make it better in case they are not controversial. After analyzing the fund documents, it was found out that such a restriction in general only applies if a company that provides versatile products and services receives significant revenues from a questionable source, if the primary use is questionable as such, and if it has not just an accessory purpose.

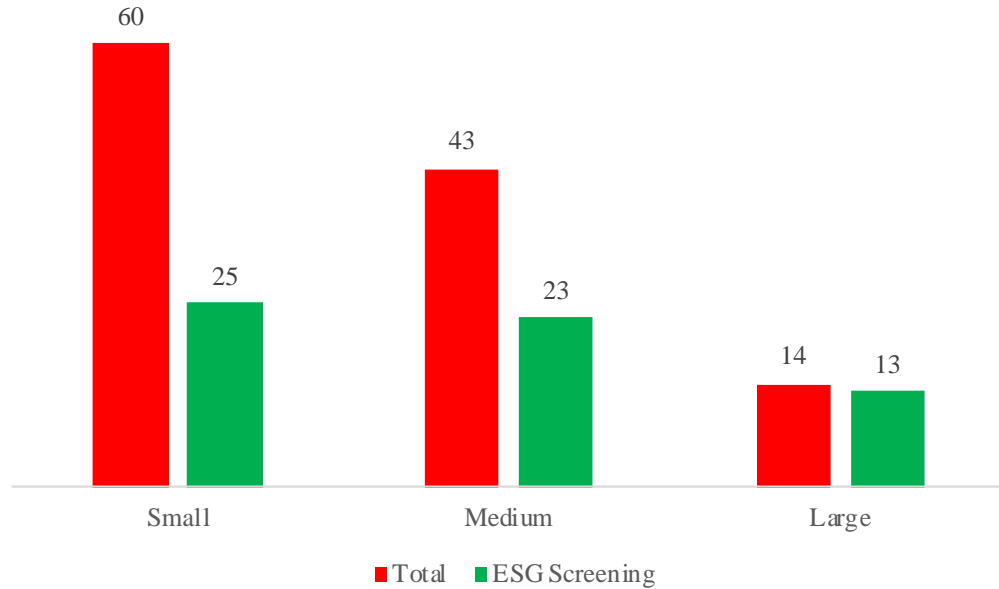
61 PE and other alternative asset managers conduct a screening. Although, this is 7 companies less than those performing ESG DD, 5 out of the 61 do not claim to do this exercise. They just exclude certain types of investments. Three of them are from North America and two from Europe, three are small, one is mid-size, and one is a large one. Four of them do not mention ESG in their fund documents. Out of the 61 firms that do a screening, 1 is from Australia, 31 from Europe, and 29 from North America including 3 from Canada.

Chart 48: ESG Screening by Region



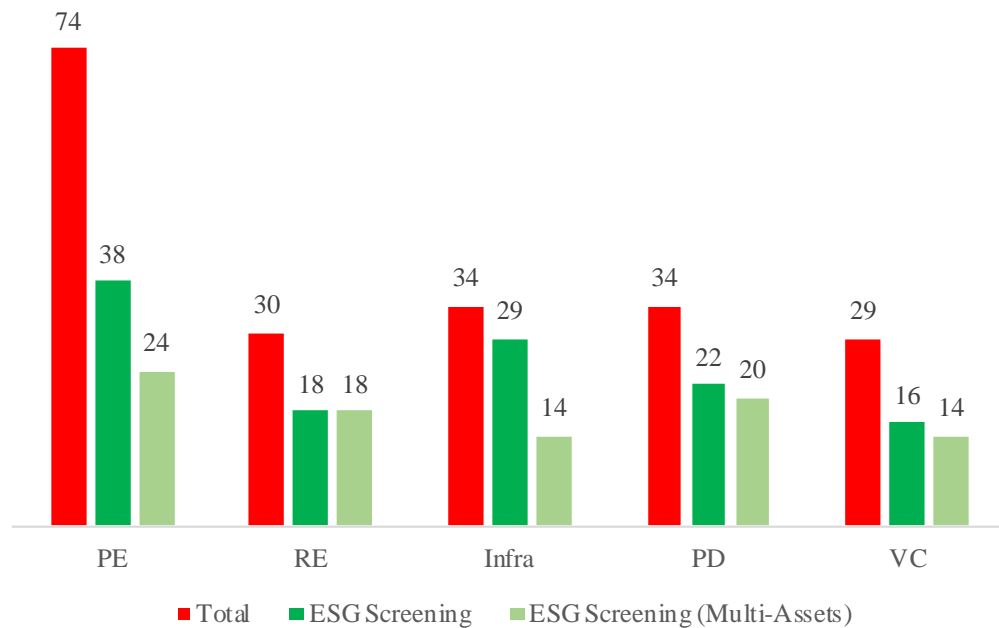
25 are small companies, 23 are medium-size, and 13 are large ones.

Chart 49: ESG Screening by Size



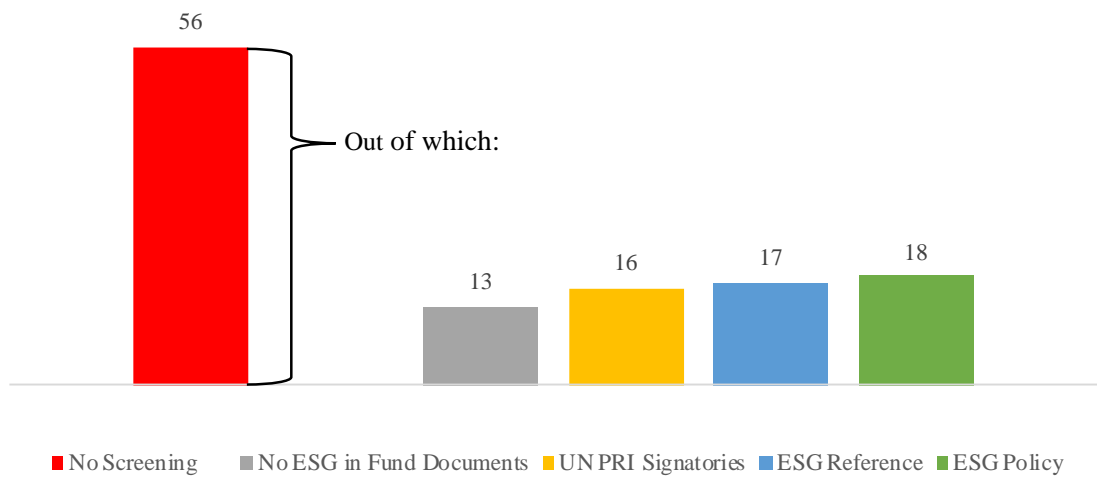
24 out of the 38 firms that do PE pursue other strategies. All 18 RE firms look for other investments but only 14 of the 29 Infra companies do the same. 20 of the 22 PD managers invest in other asset classes, and 14 out of the 16 VC firms do the same.

Chart 50: ESG Screening by Asset Class



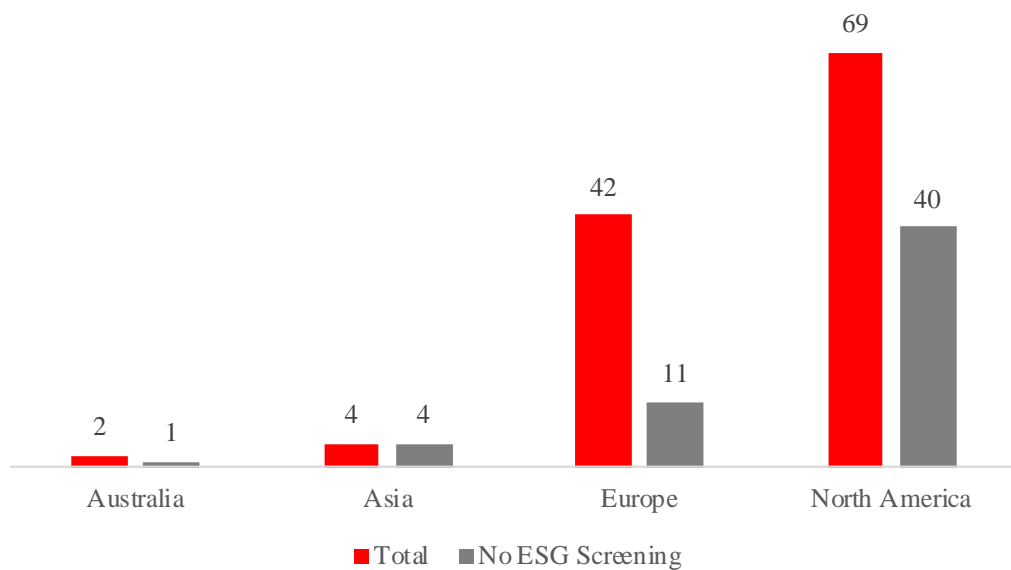
On the other hand, 56 managers do not screen at all. 13 of them do not mention ESG in their fund documents. However, 16 are signatories to the UN PRI, 17 are mentioning ESG as part of their business on their website, and 18 even have an ESG policy. Their ESG approach is therefore considered as lighter.

Chart 51: No ESG Screening Compared to Other Efforts



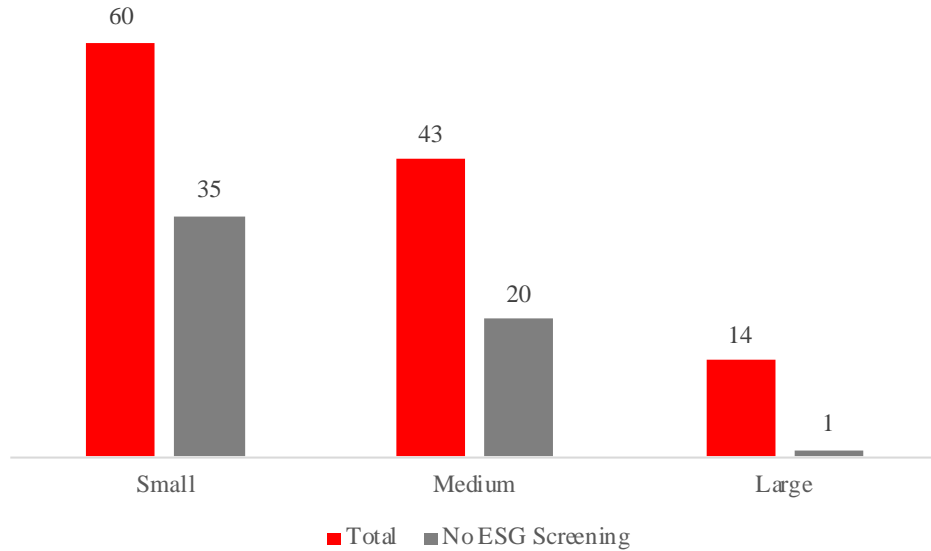
1 firm is from Australia, 4 from China, 11 from Europe, and 40 are headquartered in North America including 1 from Canada.

Chart 52: No ESG Screening by Region



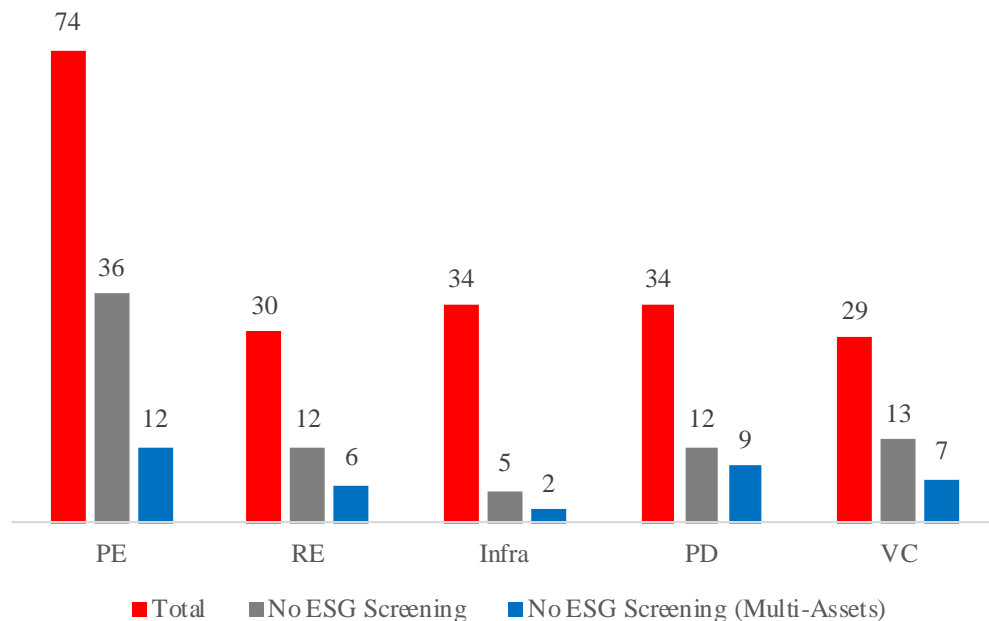
35 are small firms, 20 are medium-size, and 1 is large.

Chart 53: No ESG Screening by Size



Out of the 36 managers that do PE only 12 pursue other strategies. The 6 of the 12 RE firms without a score look for other investments, and only 2 out of the 5 Infra companies do the same. 9 of the 12 PD firms invest in other asset classes, and 7 out of the 13 VC managers seek for different opportunities, too.

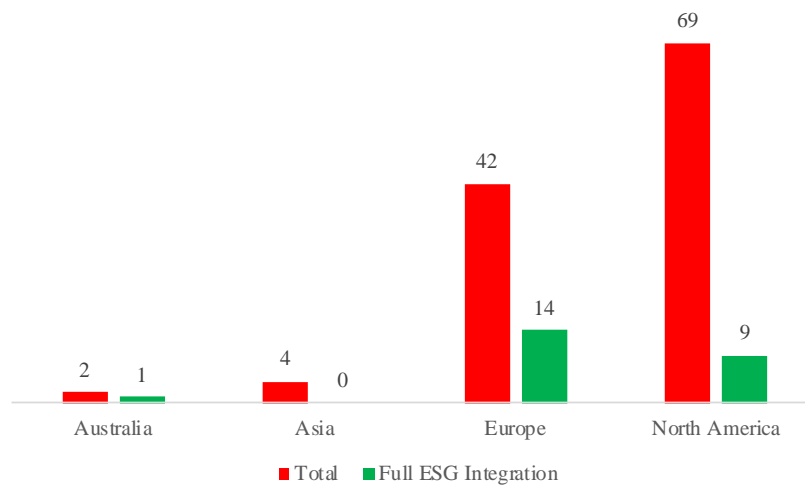
Chart 54: No ESG Screening by Asset Class



4.2.4. Full Integration

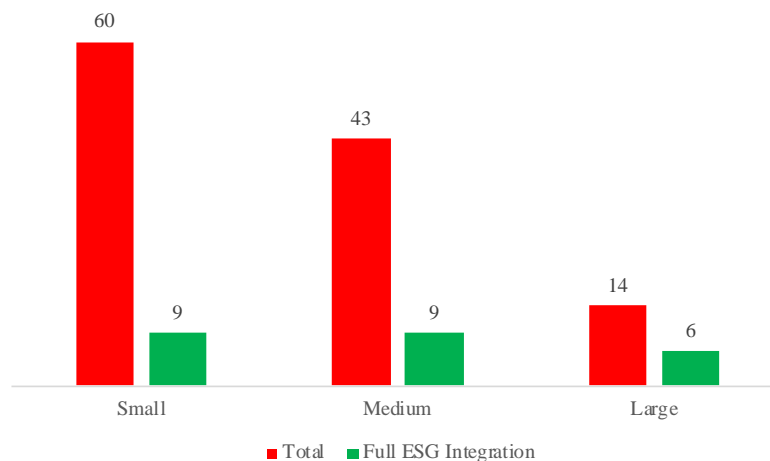
Asset managers for which ESG is not only an integrated part of their investment process but also a potential deal-breaker if red flags are found will receive another point, as it can be considered that they have fully integrated ESG in their investment process. Such firms evaluate ESG during the DD process as well and do screen investment opportunities, but as the cancellation of a potential investment is possible, their analysis even goes deeper. In total, 24 asset managers go down this route. 1 is from Australia, 14 are from Europe, and 9 are headquartered in North America including 1 in Canada.

Chart 55: Full ESG Integration by Region



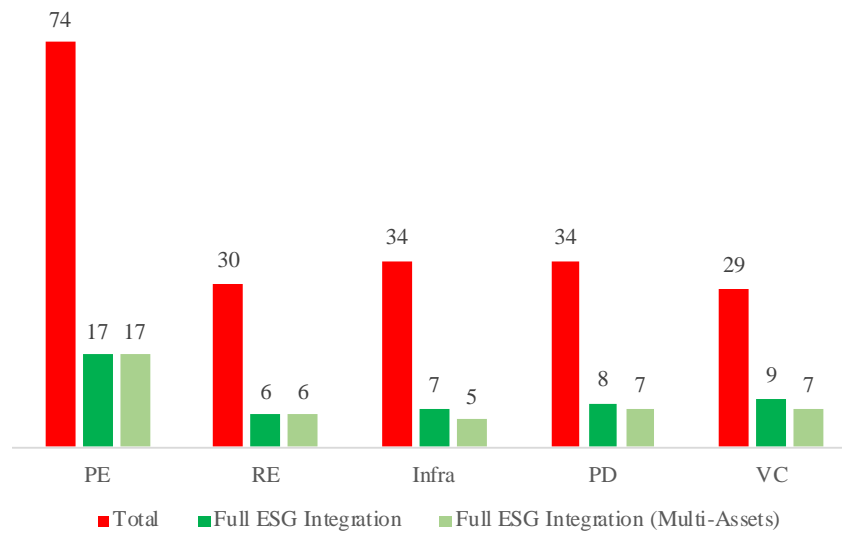
9 are small firms, 9 are medium-size, and 6 are large ones.

Chart 56: Full ESG Integration by Size



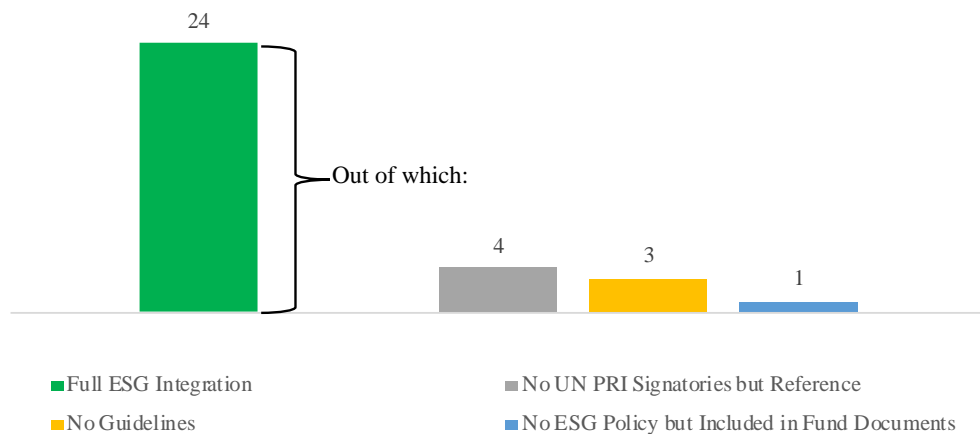
17 companies do PE but also pursue other strategies. 6 look for RE, and all of them are multi-asset managers. 5 out of the 7 Infra companies seek for other investments. Except for 1, all other 7 PD managers invest in other asset classes, and 7 out of 9 VC firms do the same.

Chart 57: Full ESG Integration by Asset Class



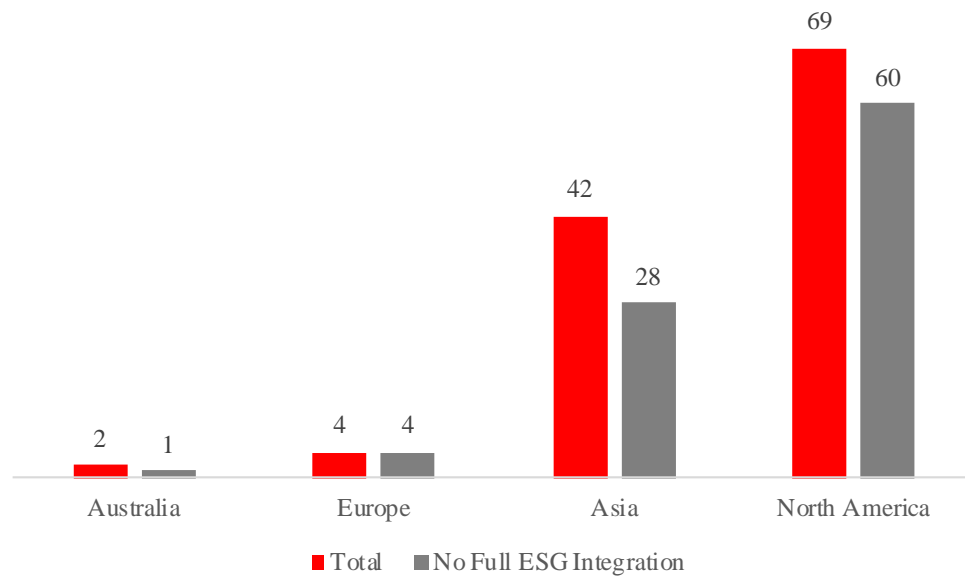
4 out of the 24 managers that fully integrate ESG in their investment process have not signed the UN PRI although they refer to them, and 3 of them even do not adhere to any initiative or guideline. 1 of the 24 firms does not have an ESG policy, as it just puts its detailed ESG approach in its fund documents. All of them are from North America and have different sizes and strategies.

Chart 58: Full ESG Integration Compared to Other Efforts



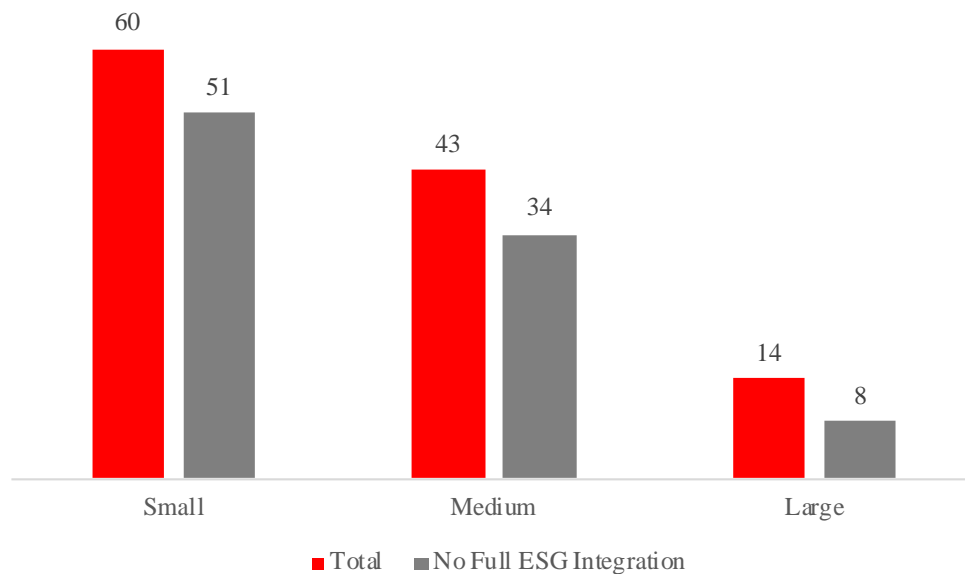
In return, the vast majority of 93 PE and other alternative managers do not fully integrate ESG, of which 1 is from Australia, 4 from China, 28 from Europe, and 60 are headquartered in North America including 3 in Canada.

Chart 59: No Full Integration by Region



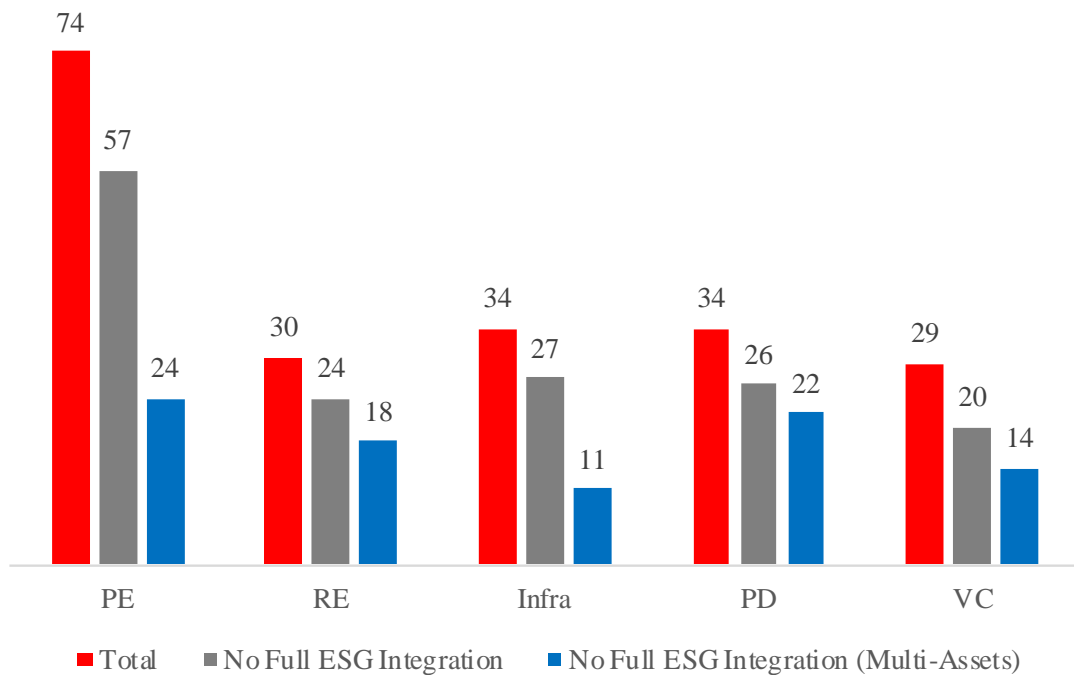
51 are small firms, 34 are medium-size, and 8 are large ones.

Chart 60: No Full Integration by Size



24 out of the 57 houses that do PE pursue other investments as well. 18 of the 24 RE managers invest in other asset classes. 27 Infra managers do not cancel investments due to ESG red flags, and 11 of them seek for different asset opportunities, too. 26 firms invest in PD of which 22 look for other asset classes. Out of the 20 managers that invest in VC, 14 pursue other strategies.

Chart 61: No Full Integration by Asset Class

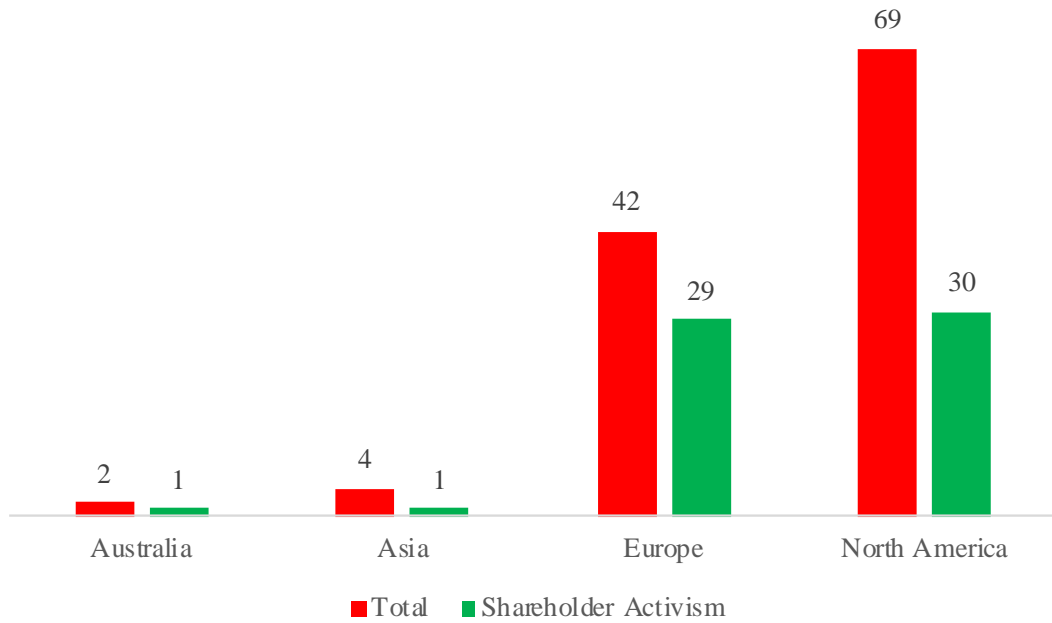


4.2.5. Shareholder Activism

Potential improvements not only in relation to ESG can be realized during the holding period of the investments. Another point is given to those firms that utilize shareholder activism for the implementation of ESG standards.

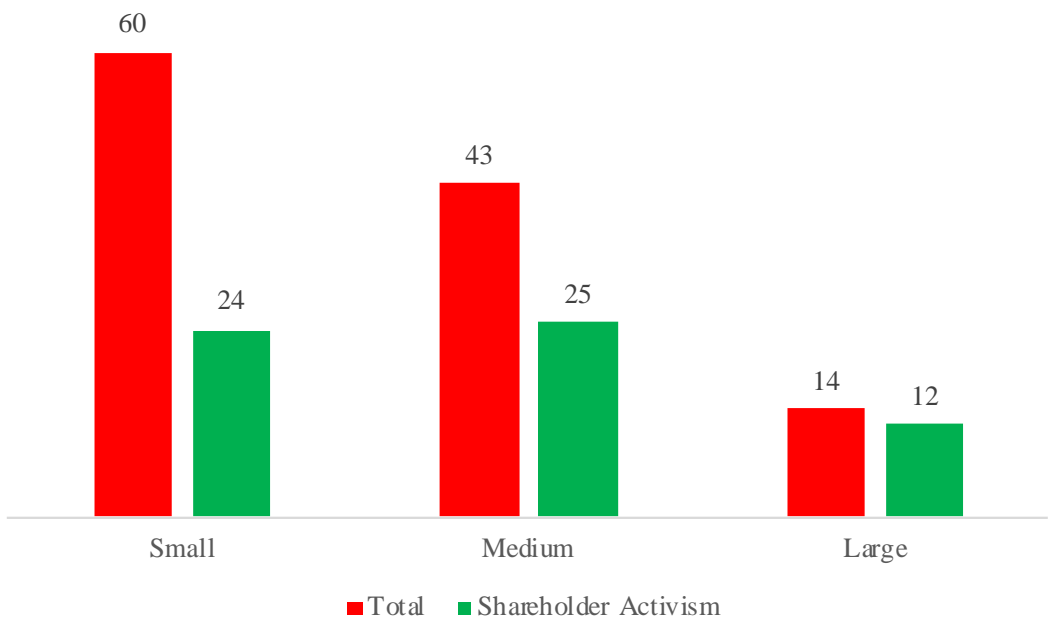
61 asset managers mention in one of their documents that they do it. 1 is from Australia, 1 from China, 29 are from Europe, and 30 are headquartered in North America including 3 in Canada.

Chart 62: Shareholder Activism by Region



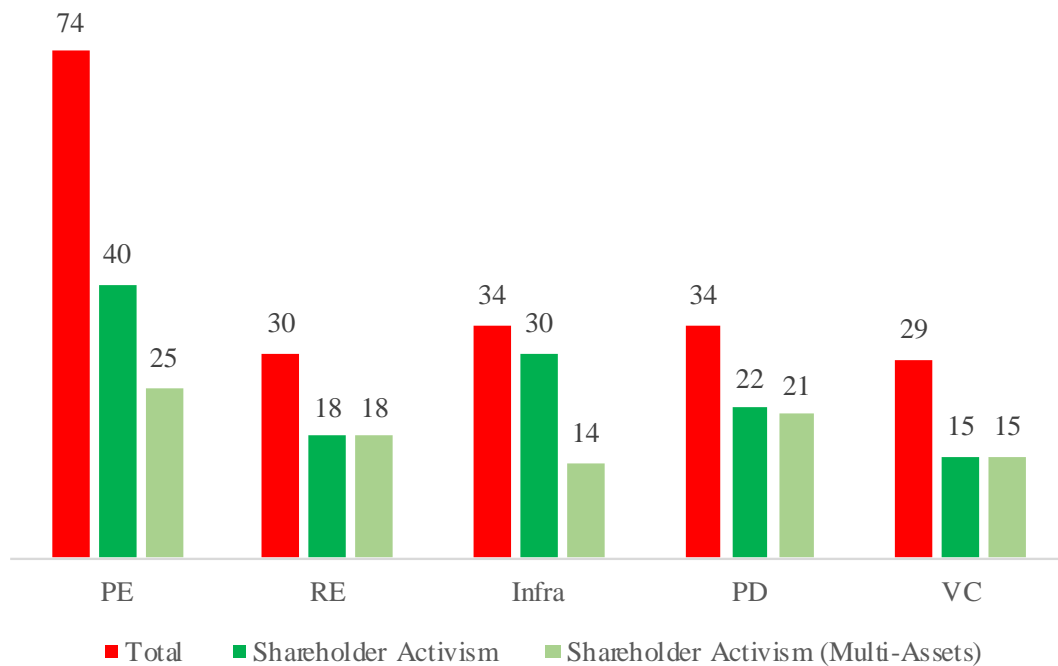
24 are small firms, 25 are medium-sized, and 12 are large ones.

Chart 63: Shareholder Activism by Size



Out of the 40 managers that do PE, 25 pursue other strategies, too. All of the 18 RE firms invest in further asset classes. 14 out of the 30 the Infra companies seek for different opportunities as well. Except for 1 PD house, all other 21 look for other asset classes, and all 15 VC managers are multi-asset managers.

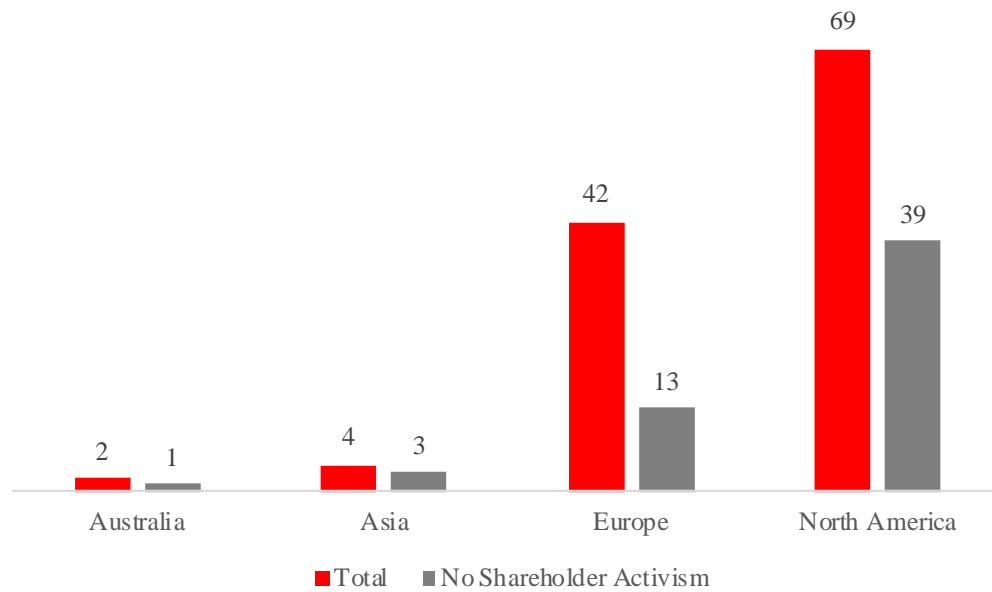
Chart 64: Shareholder Activism by Asset Class



18 of the 61 asset managers that utilize shareholder activism have not signed the UN PRI. Just two of them adhere to other initiatives or guidelines. Except for two, all of them are from North America and have different sizes and strategies. Five of them, of which four are from North America, do not have an ESG policy in place. One US manager even does not mention ESG in its fund documents. Two firms do not mention that ESG is part of their DD process, eight further ones do not screen potential investments, and even 33 more do not fully integrate ESG in their investment process. They just limit their ESG efforts to the period when they have control. 18 of such companies explicitly say in their documents that the holding period in which they are in control is the only possibility to make investments ESG compliant, and this would not be possible if they would have excluded them from the beginning. If this is actually the case might be questionable, when at least an ESG evaluation in the DD process was not undertaken at all.

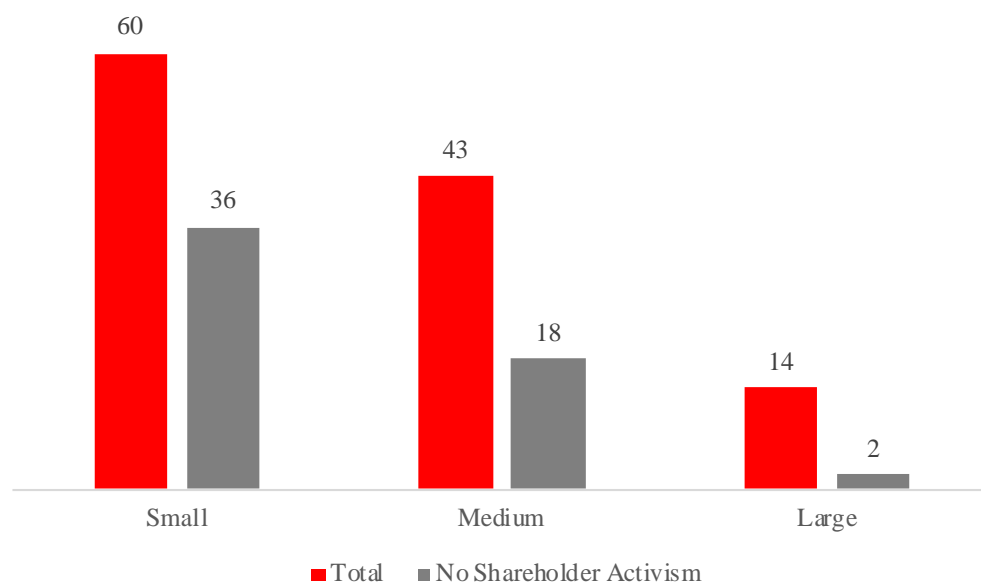
However, 56 asset managers do not use shareholder activism in relation to ESG. 1 is from Australia, 3 are from China, 13 are from Europe, and 39 are headquartered in North America including 1 in Canada.

Chart 65: No Shareholder Activism by Region



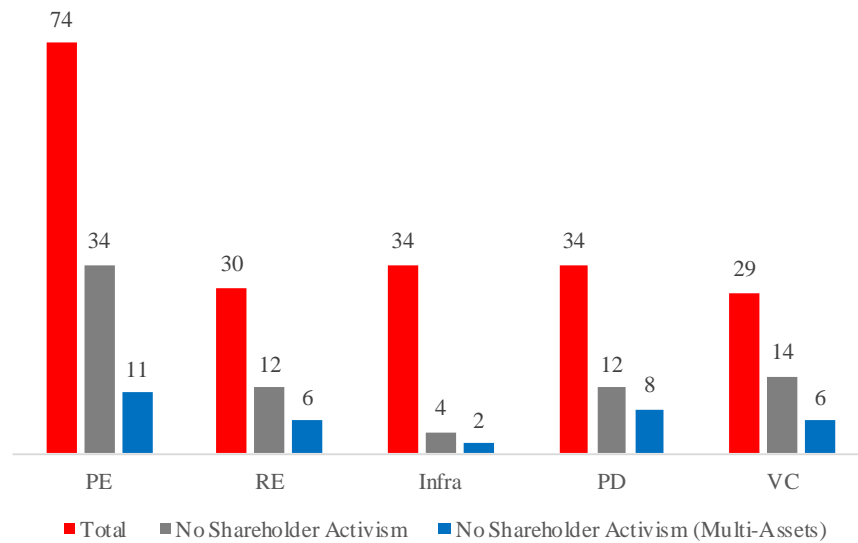
36 are small firms, 18 are medium-sized, and 2 are large ones.

Chart 66: No Shareholder Activism by Size



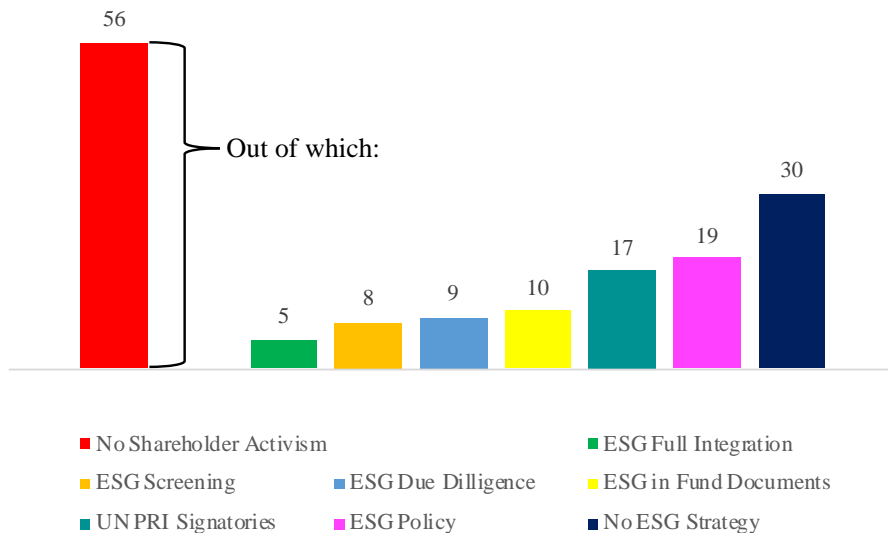
Only 11 out of the 34 managers that do PE pursue other investment strategies, too. Half of the 12 RE firms look for other opportunities, and 2 out of 4 Infra companies do the same. 12 PD houses do not make the effort of which 8 seek for other investments as well. 6 out of 14 VC firms are multi-asset managers.

Chart 67: No Shareholder Activism by Asset Class



30 out of the 56 companies do not have any ESG strategy at all, but 17 of them have signed the UN PRI. 19 have an ESG policy in place, and 10 mention it in their fund documents. Nine of them perform an ESG DD, eight screen investments, and five have fully integrated it.

Chart 68: No Shareholder Activism Compared to Other Efforts

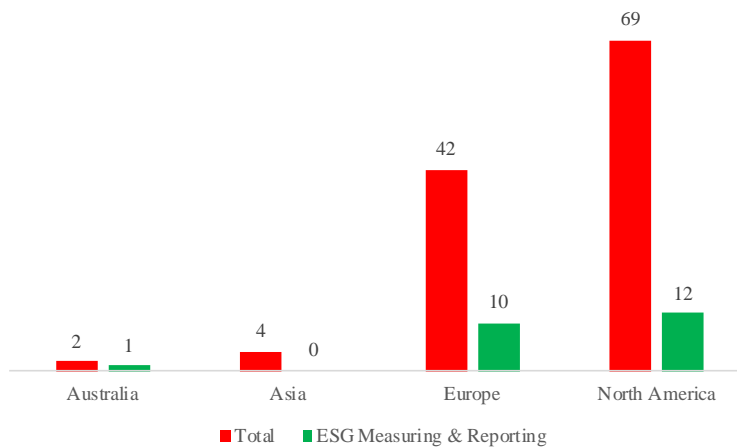


The shareholder activism analysis shows once more that signing the UN PRI is not automatically causing PE and other alternative managers to go full steam ahead, that European asset managers and bigger firms and those that pursue a multi-strategy approach are more advanced, and that Infra is best in class.

4.2.6. Measuring and Reporting

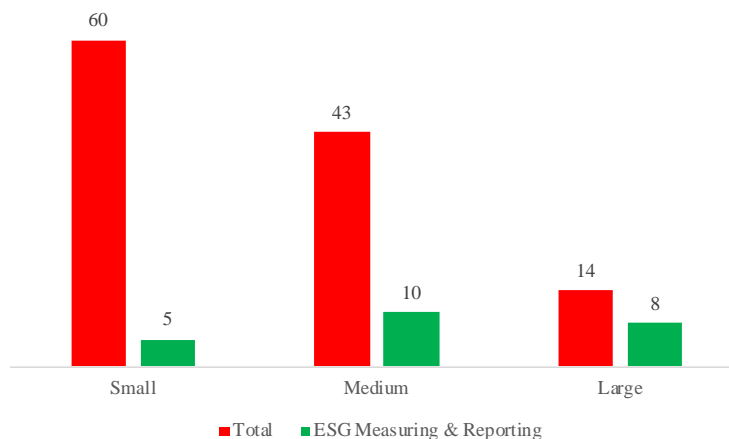
A last point is awarded to those PE and other alternative asset managers who even measure their efforts and report them either publicly or to investors via their quarterly or annual reports. This is done by 23 firms. 1 is from Australia, 10 are from Europe, and 12 are headquartered in North America including 1 in Canada.

Chart 69: Measuring and Reporting by Region



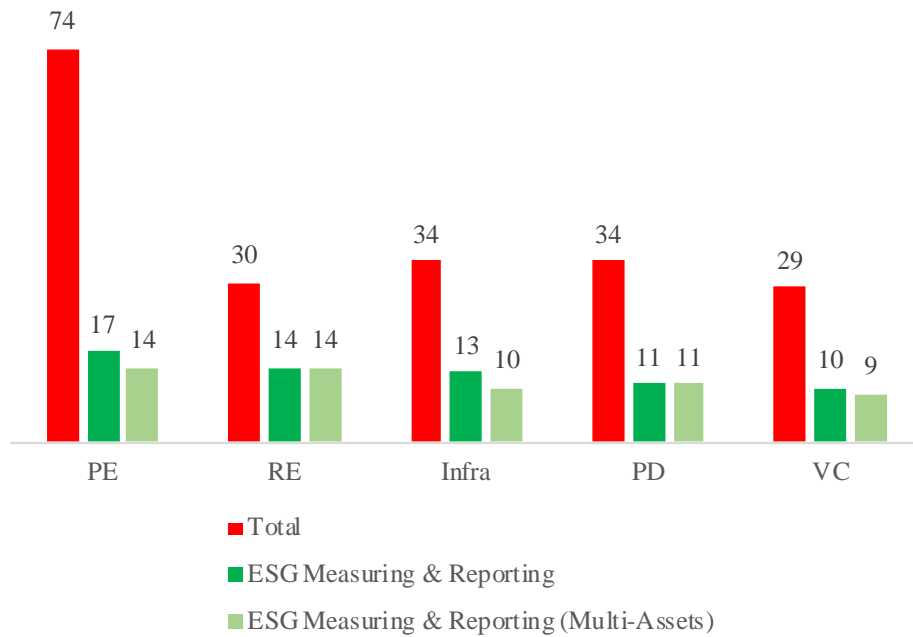
5 are small asset managers, 10 are medium-size, and 8 are large ones.

Chart 70: Measuring and Reporting by Size



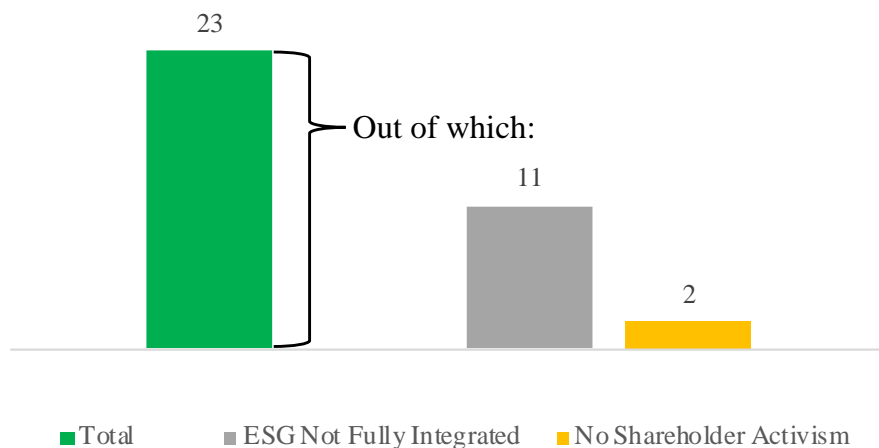
Out of the 17 companies that invest in PE, 14 look for other asset classes, too. All 14 RE and all 11 PD firms pursue other opportunities. 10 of the 13 Infra managers seek for other asset classes, and 9 out of 10 VC companies do the same.

Chart 71: Measuring and Reporting by Asset Class



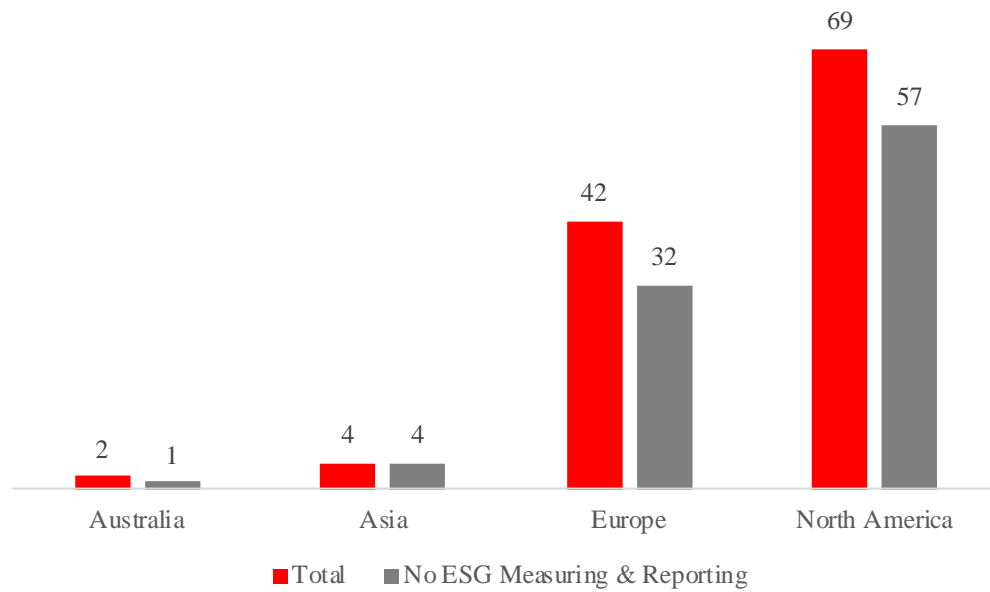
11 of the 23 asset managers that measure and report their efforts have not fully integrated ESG in their investment process and would not abandon opportunities if red flags would arise. And two firms do not mention shareholder activism as a tool to improve ESG matters.

Chart 72: Measuring and Reporting Compared to Other Efforts



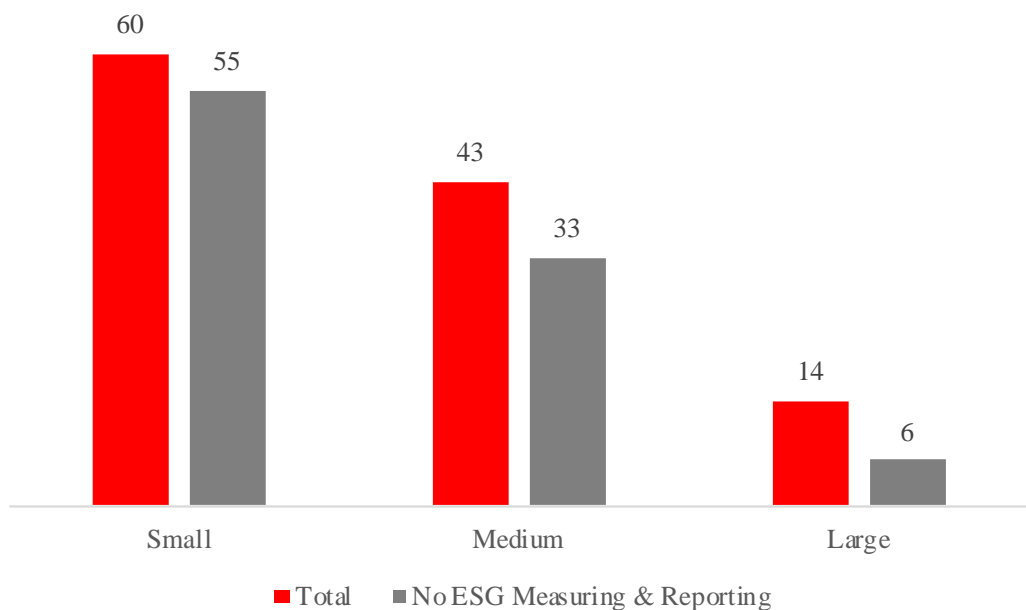
94 PE and other alternative asset managers do not measure and report. 1 is from Australia, 4 are from China, 32 are from Europe, and 57 are headquartered in North America including 3 in Canada.

Chart 73: No ESG Measurement and Reporting by Region



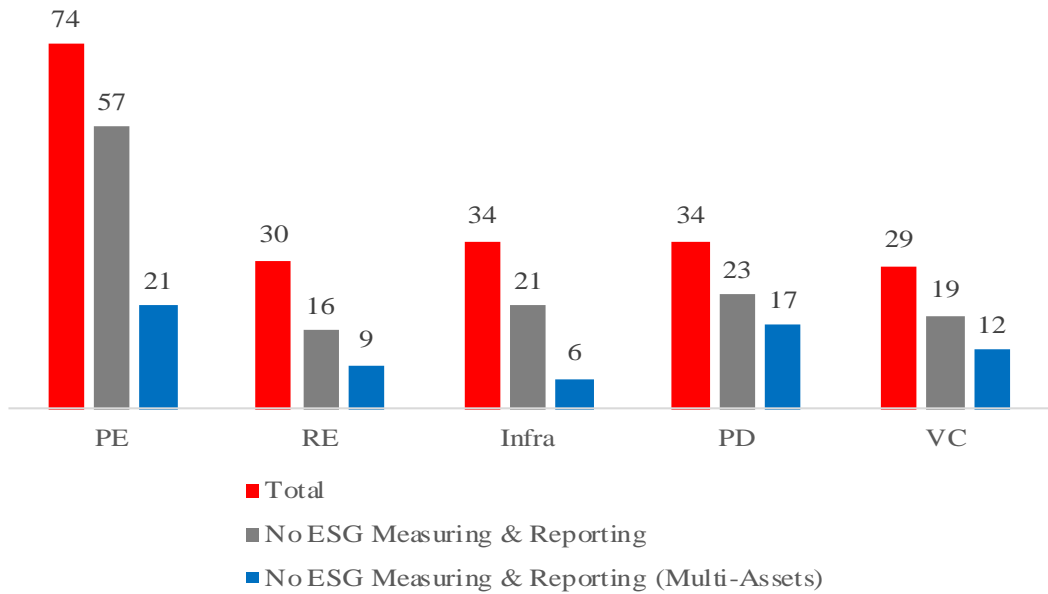
55 are small firms, 33 are medium-size, and 6 are large ones.

Chart 74: No ESG Measurement and Reporting by Size



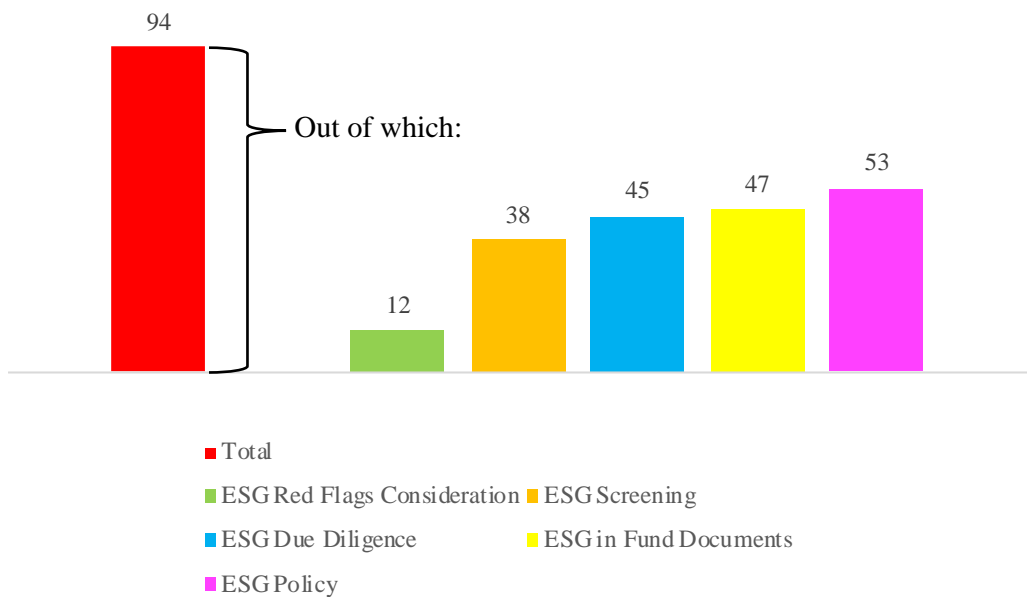
21 out of the 57 managers that do PE pursue other strategies. 9 of the 16 RE firms look for other opportunities, but only 6 of the 21 Infra companies do the same. 17 of the 23 PD asset managers invest in other asset classes, like 12 out of the 19 VC firms.

Chart 75: No ESG Measurement and Reporting by Asset Class



53 of the 94 companies that do not measure and report their efforts have set up an ESG policy, 47 mention ESG in their fund documents, 45 assess it in the DD process, 38 screen potential investments, and 12 consider red flags as irreconcilable risk.

Chart 76: No ESG Measurement and Reporting Compared to Other Efforts

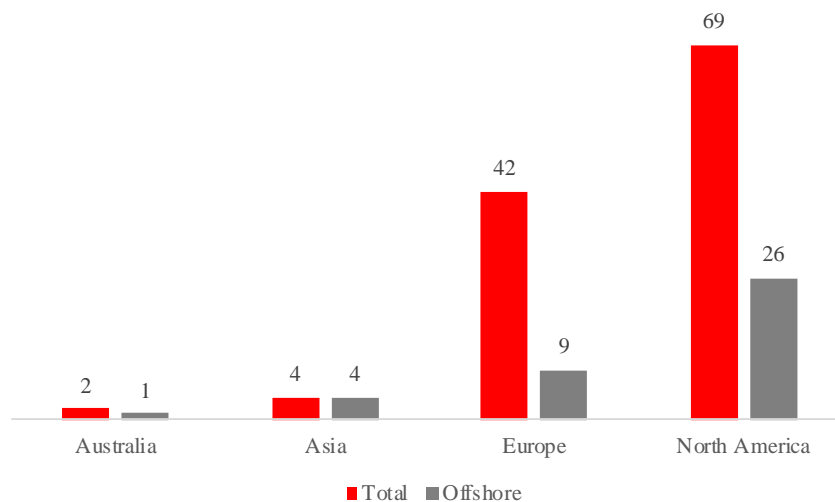


Measuring and reporting is therefore the ultimate step concerning ESG compliance. Most companies that do it are located in Europe. The bigger they are the more likely it is. The same counts for multi-asset managers, and again Infra is the most ESG oriented asset class when it comes to quantifying and telling others about their efforts.

4.2.7. Corporate Governance by Asset Managers

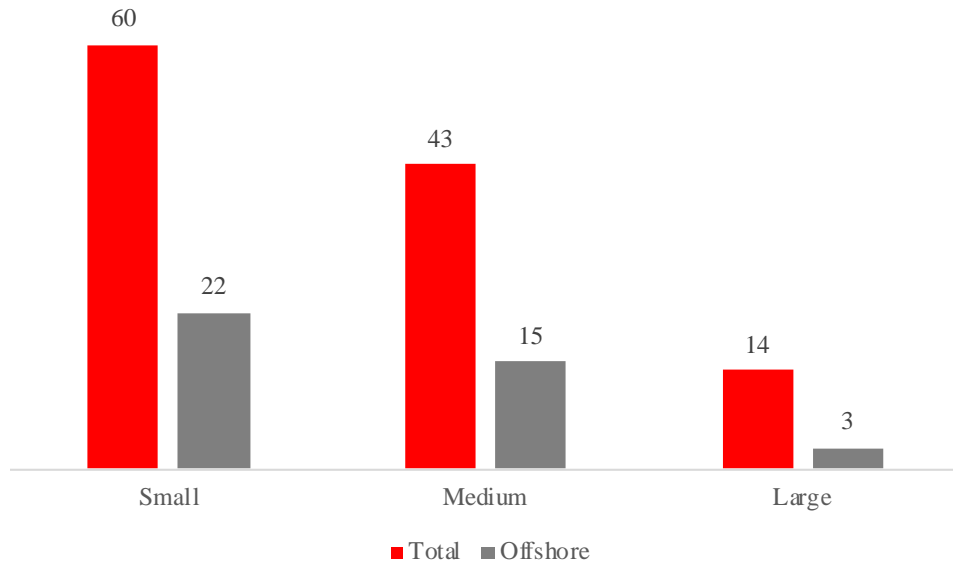
Furthermore, it is analyzed what ESG factors the asset managers consider for their own company and if they go beyond initiatives for own cost reduction and community services, if PE and other alternative managers still use tax havens as locations for their funds. In such cases, those firms that according to their fund documents still stick to such jurisdictions, they are degraded by one point if they have had at least received one or better. Only such companies, which perform ESG DD, truly consider ESG factors as potential deal-breakers, use shareholder activism for improvements, measure and report their efforts and adhere to good corporate and tax governance can be considered as having fully integrated ESG in their business. However, the degradation does not apply to those PE and other alternative asset managers who have started moving funds away from offshore domiciles and do not use aggressive taxation approaches for their latest fund vehicles. Furthermore, it is analyzed if difference between offshore and onshore funds does exist, if there is a link regarding ESG. In total, 40 asset managers use offshore jurisdictions for their funds. 1 is from Australia, 4 are from China, 9 are from Europe, and 26 are headquartered in North America including 1 in Canada.

Chart 77: Offshore Managers by Region



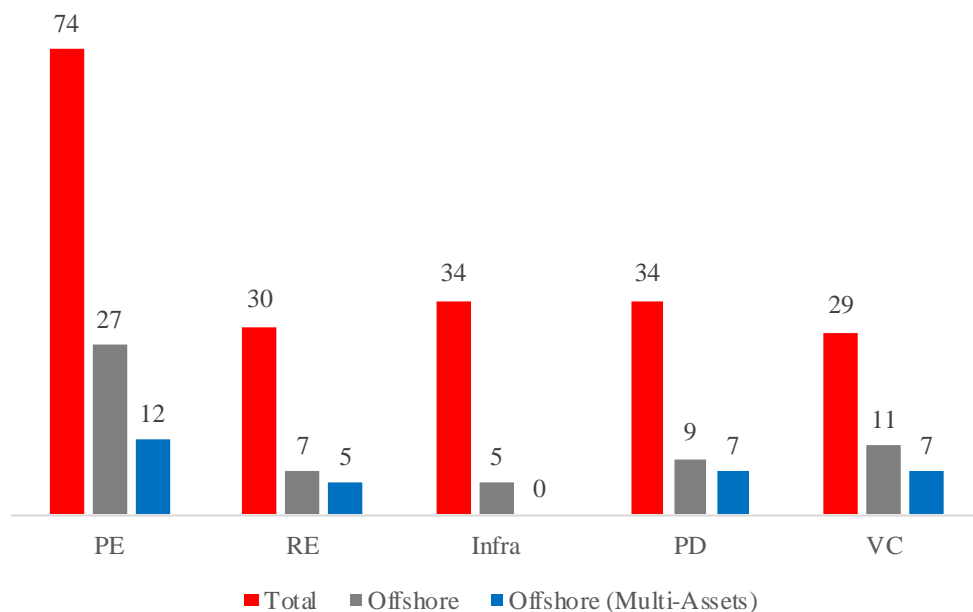
22 are small firms, 15 are medium-size, and only 3 are large ones.

Chart 78: Offshore Managers by Size



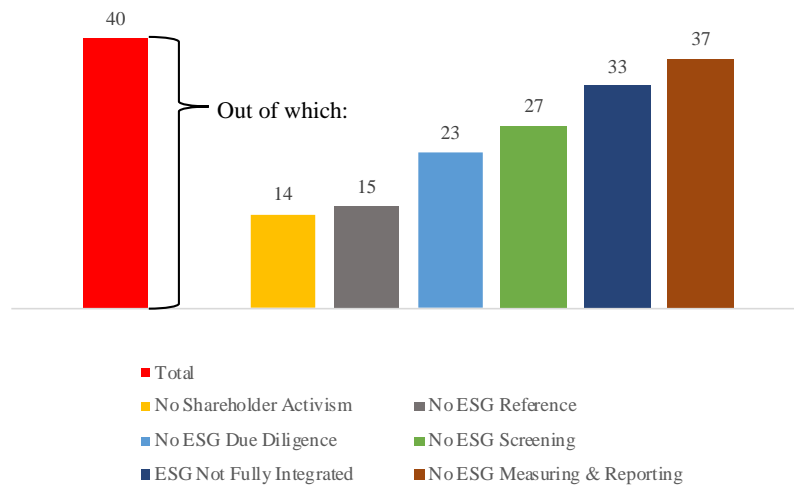
12 out of the 27 managers that do PE pursue other strategies as well. Five of the seven RE firms do the same. All five offshore Infra do not seek for other opportunities. 7 of the 9 PD firms look for other asset classes, and 7 of the 11 VC companies invest in strategies, too.

Chart 79: Offshore Managers by Asset Class



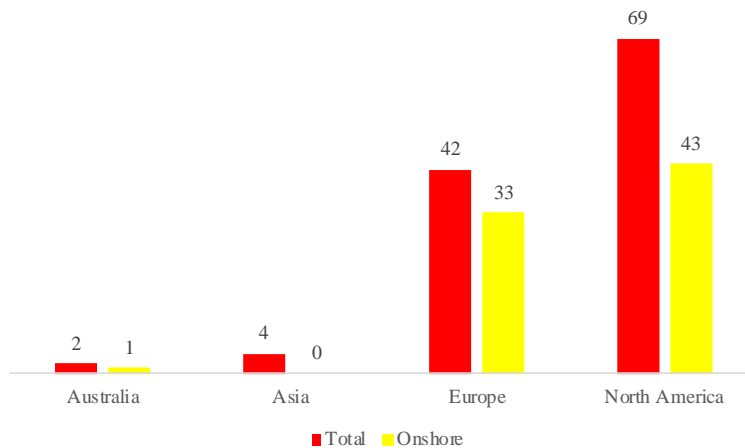
While 100% of the Chinese asset managers have offshore funds, it is 50% of the Australian ones, 37% of the North American ones, and only 21% of the European firms do the same. However, no significant correlation is found between offshore domiciles and firm size or multi-asset managers versus those that only pursue a single strategy. However, 15 of the 40 offshore managers do not refer to ESG. 23 firms do not perform ESG DD, and 27 do not do an ESG screening. 33 companies have not fully integrated ESG in their investment process, 14 do not use shareholder activism to implement or improve ESG, and 37 companies do not measure or report their efforts.

Chart 80: Offshore Managers Compared to Other Efforts



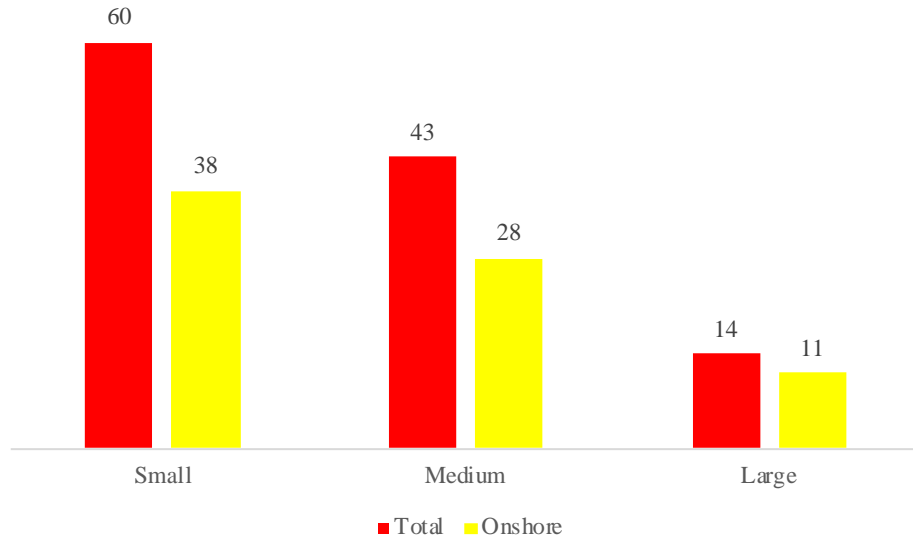
But 77 PE and other alternative investors are onshore. 1 is from Australia, 33 are from Europe, and 43 are headquartered in North America including 3 in Canada.

Chart 81: Onshore Managers by Region



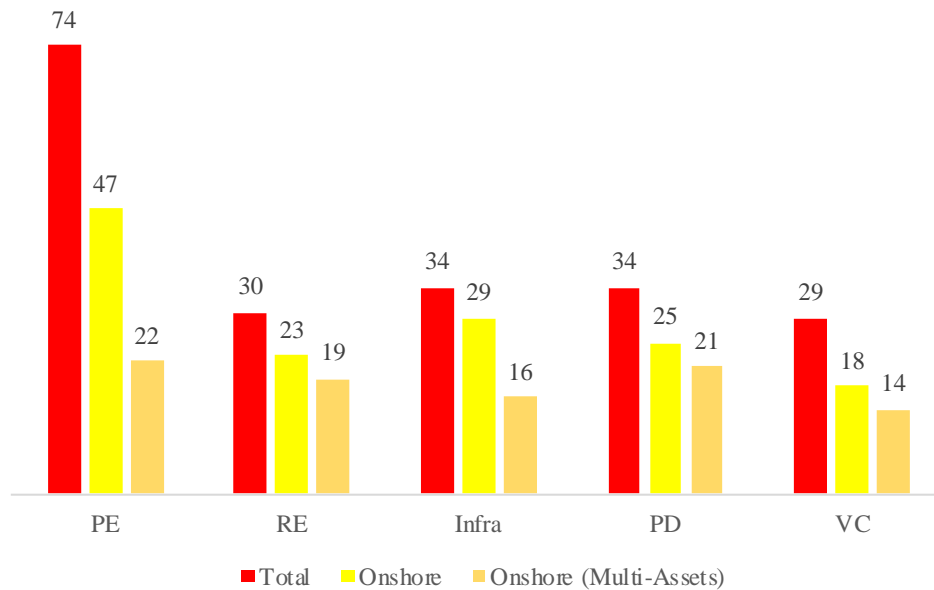
38 are small firms, 28 are medium-size, and 11 are large ones.

Chart 82: Onshore Managers by Size



22 out of the 47 managers that do PE pursue other strategies as well. 19 of the 23 RE firms look for different opportunities. 16 of the 29 Infra companies seek for other investments, and 25 of the PD firms do the same. 14 out of the 18 VC houses are multi-asset managers.

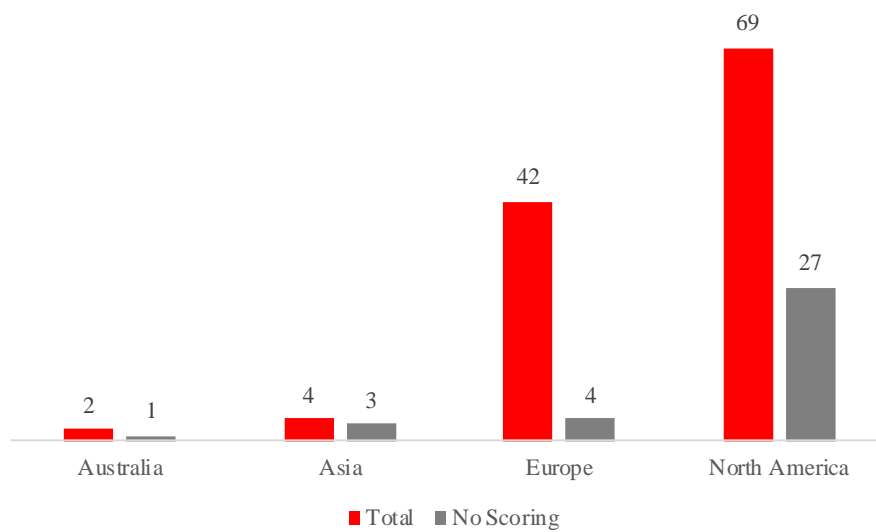
Chart 83: Onshore Managers by Asset Class



4.2.8. Final ESG Scoring

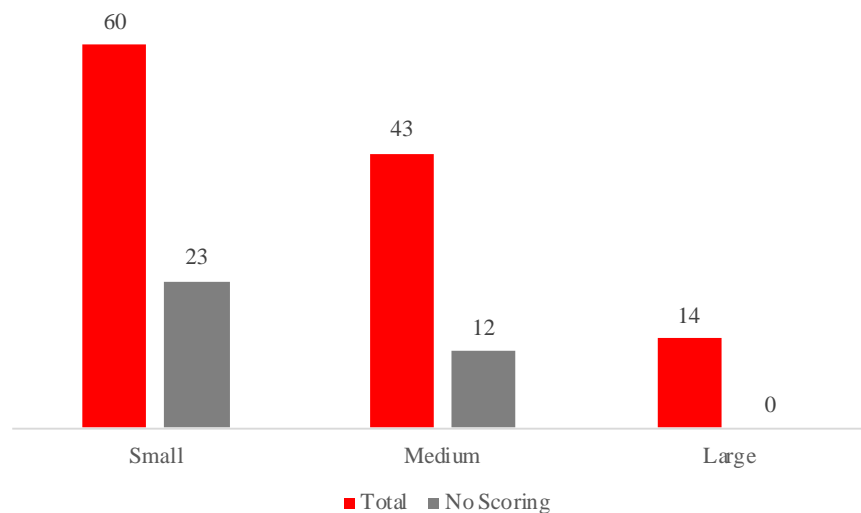
All 40 offshore funds were downgraded by one point. Therefore, considering the degradation for such vehicles, 21 firms who had initially 1 point ended up with no point, 35 PE and other alternative funds have not received any point. 1 is from Australia, 3 are from China, 4 are from Europe, and 27 are headquartered in North America.

Chart 84: No Scoring by Region



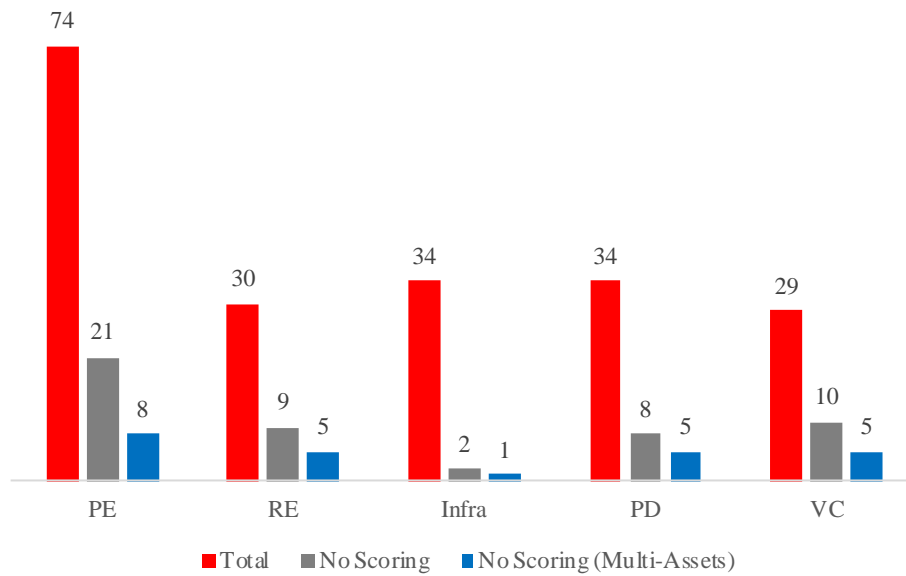
23 are small firms, and 12 are medium-sized ones.

Chart 85: No Scoring by Size



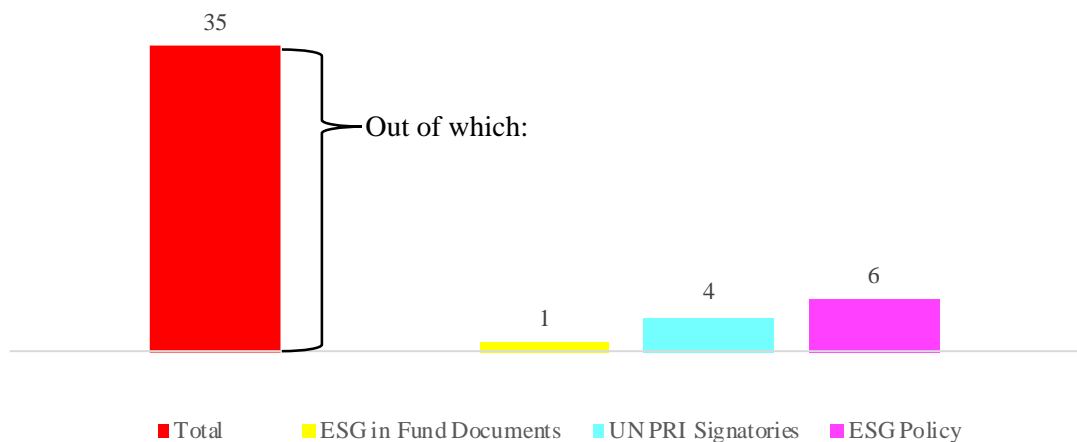
8 out of the 21 managers that do PE pursue other strategies, too. Five of the nine RE houses do the same. One out of two Infra firms is looking for different opportunities. Five of the eight PD companies seeks for other investments as well, and 5 of the 10 VC managers are multi-asset firms.

Chart 86: No Scoring by Asset Class



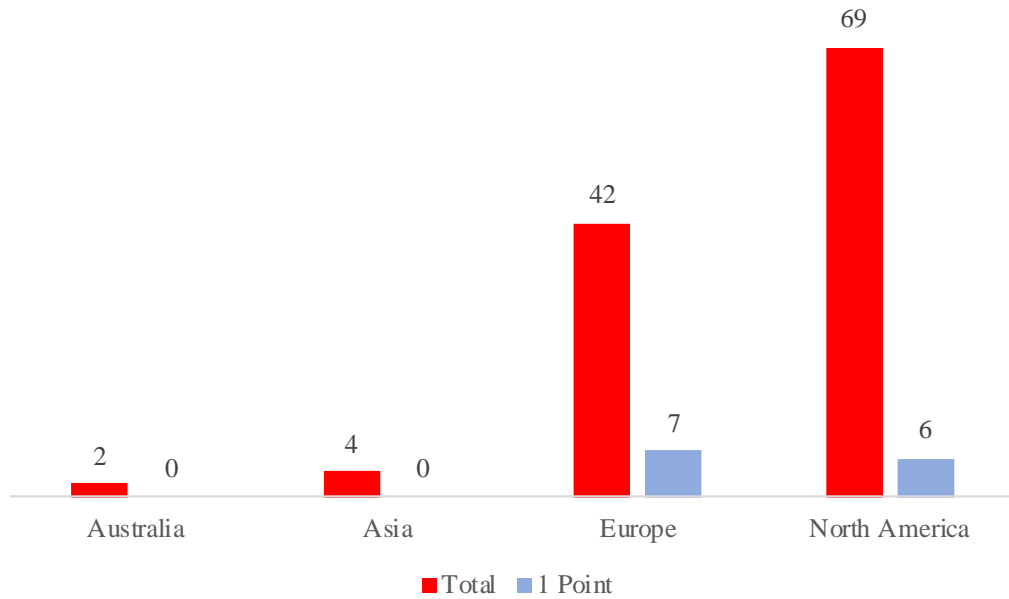
4 out of the 35 companies with zero points are signatories to the UN PRI, 6 have set up an ESG policy, and only a single one mentions ESG in its fund documents.

Chart 87: No Scoring Compared to Other Efforts



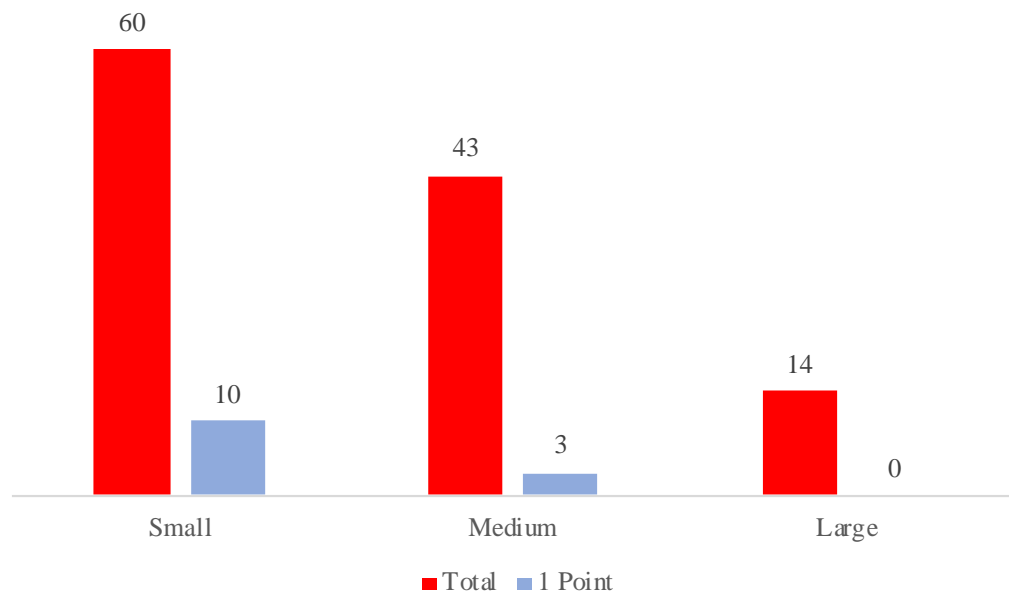
13 PE and other alternative asset managers received a single point. Seven are from Europe and six from North America.

Chart 88: One Point by Region



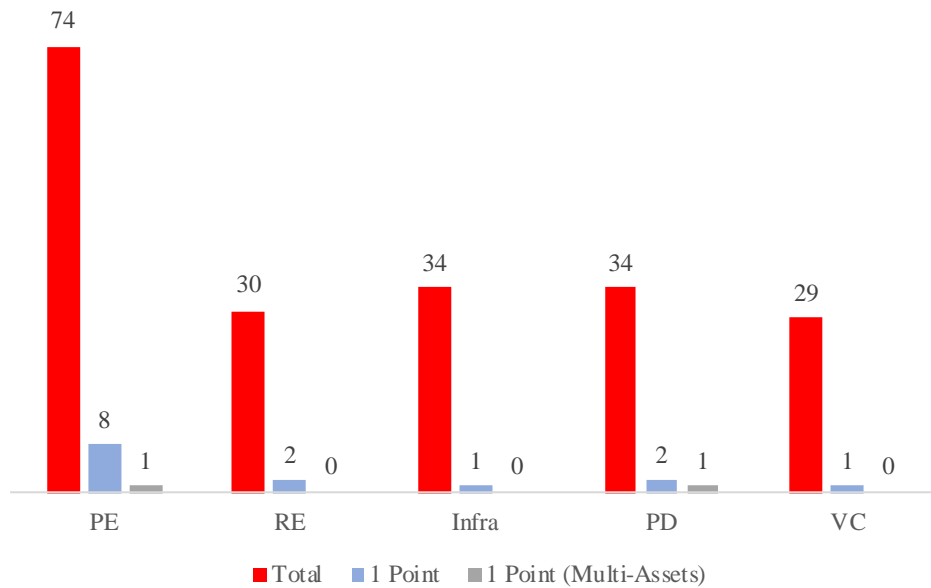
10 are small firms and 3 medium-sized ones.

Chart 89: One Point by Size



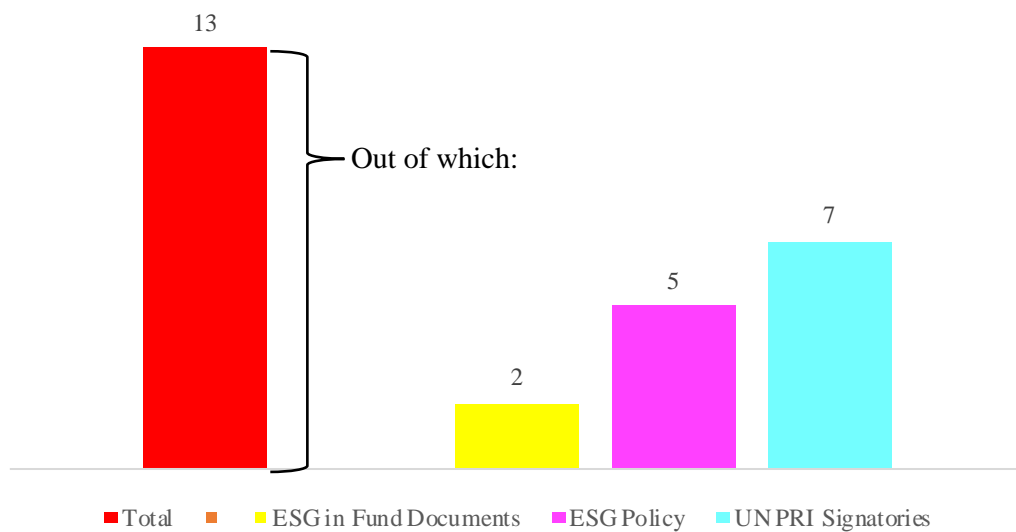
One out of the eight managers that do PE pursues other opportunities as well. The two RE houses do not look for different investments, which applies to the only Infra and the only VC company, too. One out of two PD managers invests in other assets.

Chart 90: One Point by Asset Class



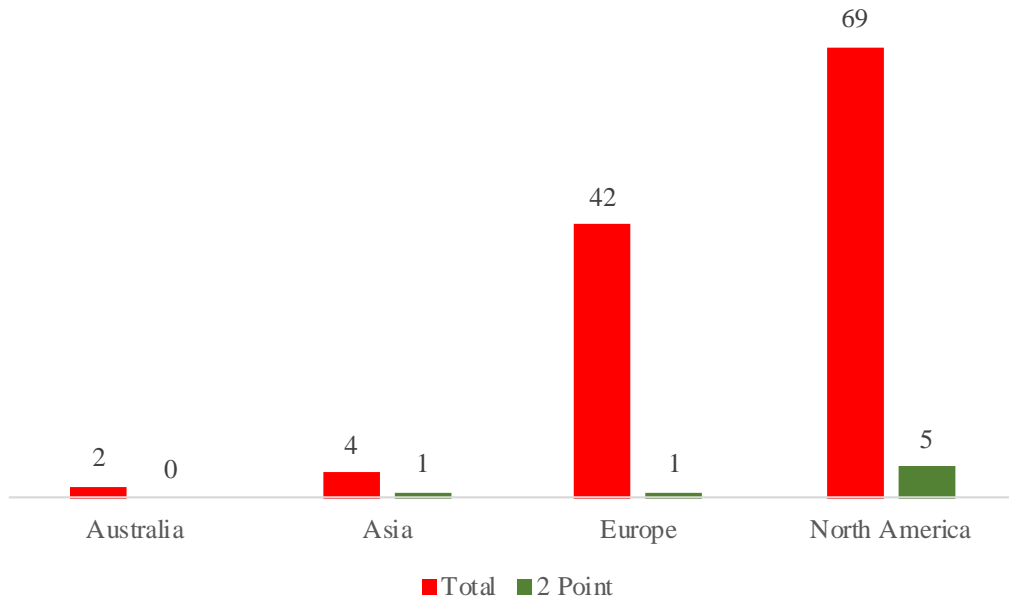
7 of the 13 firms have signed the UN PRI, 5 have set up an ESG policy, and 2 of them mention ESG in their funds documents.

Chart 91: One Point Compared to Other Efforts



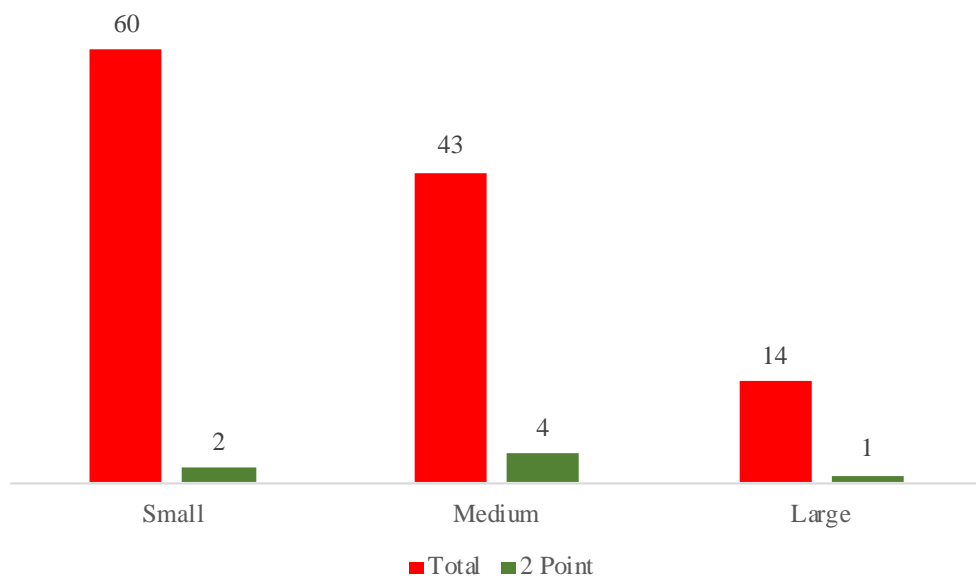
Seven asset managers have received two points. One is from China, one from Europe, and five are headquartered in North America including one in Canada.

Chart 92: Two Points by Region



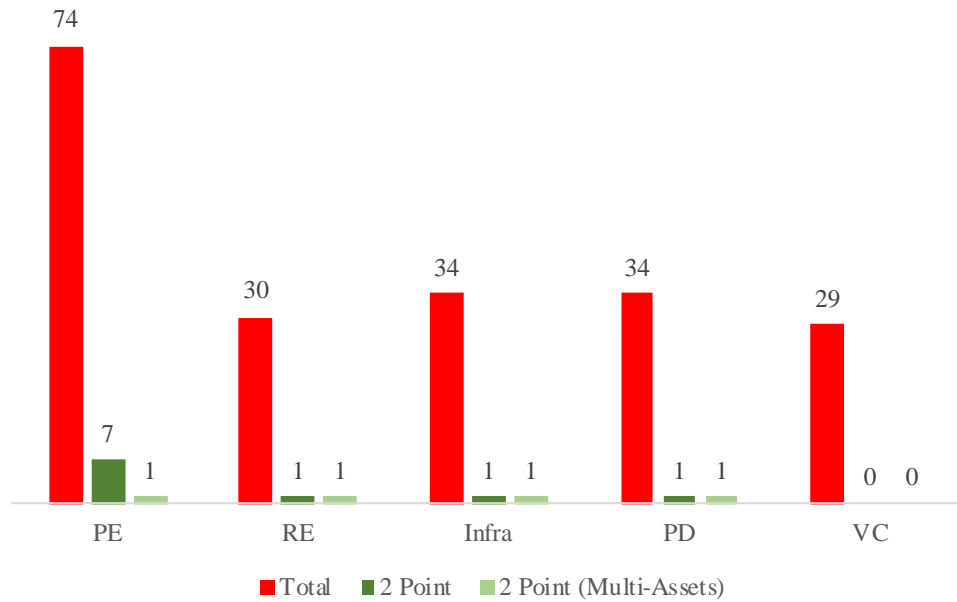
Two are small firms, four are medium-size, and one is a large one.

Chart 93: Two Points by Size



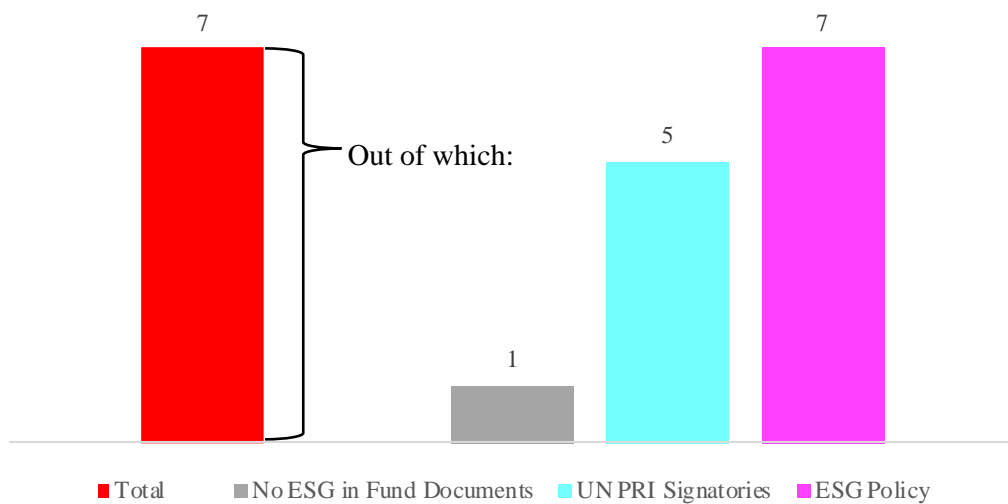
One out of the seven houses that do PE pursues other strategies, too. The only RE manager observed invests in other assets like the single Infra company as well as the one PD firm. No VC house has scored two points.

Chart 94: Two Points by Asset Class



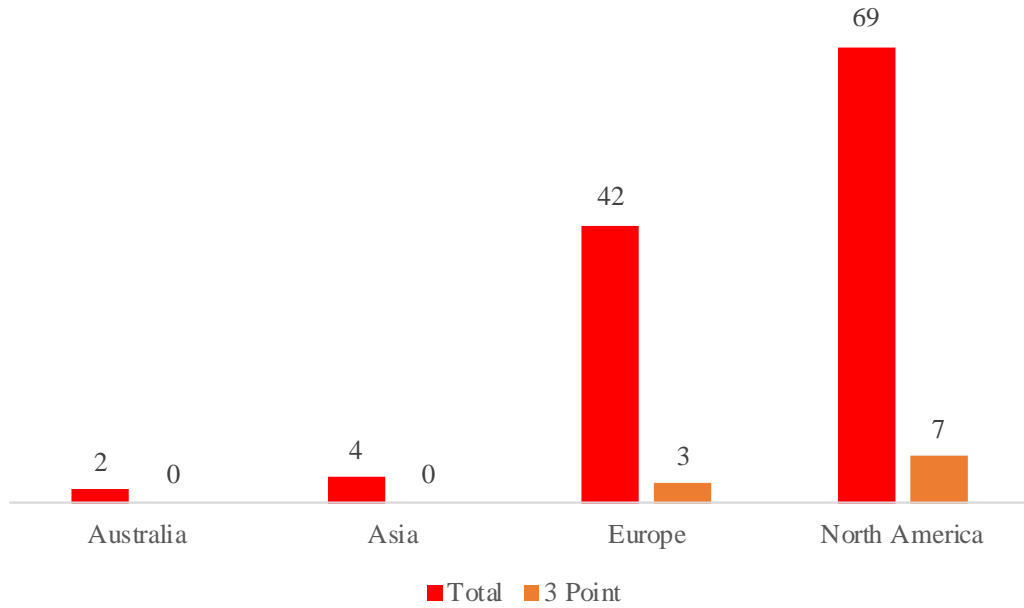
Five asset managers are signatories to the UN PRI, all of them have set up an ESG policy, and only a single one does not mention ESG in its fund documents.

Chart 95: Two Points Compared to Other Efforts



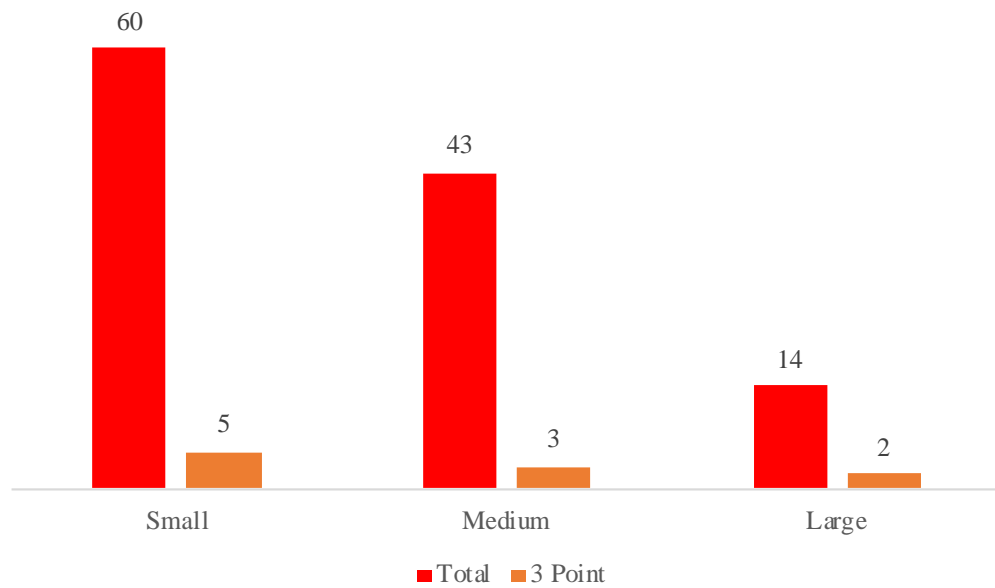
10 firms receive 3 points. Three are from Europe, and seven are headquartered in North America including one in Canada.

Chart 96: Three Points by Region



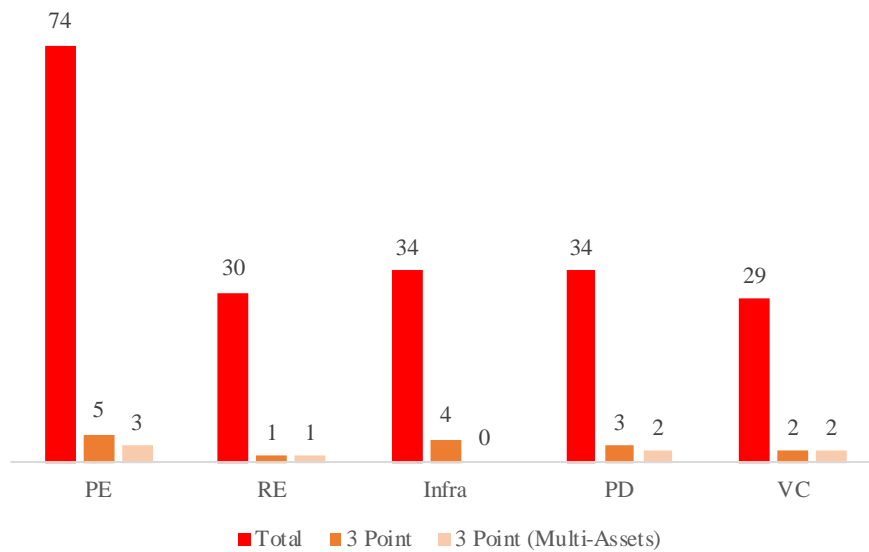
Five are small firms, three are medium-size, and two are large ones.

Chart 97: Three Points by Size



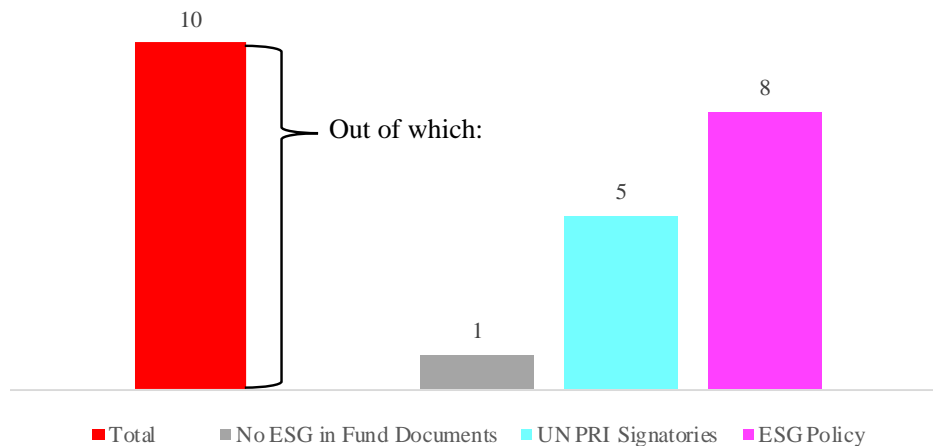
Three out of the five managers that do PE pursue other strategies as well. The only RE firm that received three points looks for other opportunities, but the four Infra houses do not seek for other investments. Two out of the three PD companies invest in other asset classes. The two VC firms are both multi-asset managers.

Chart 98: Three Points by Asset Class



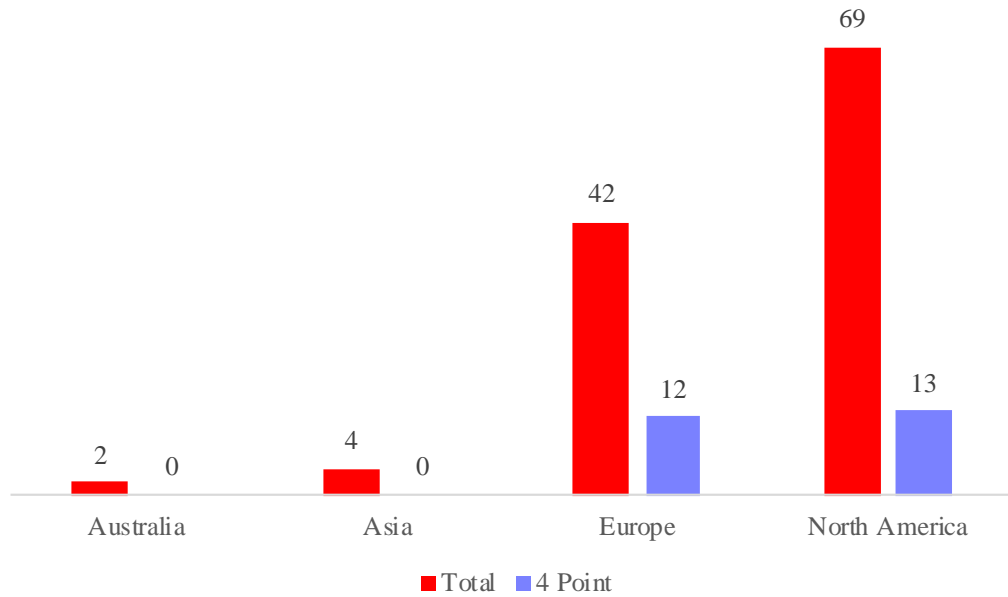
Half of the 10 PE and other alternative managers that have scored three points are signatories to the UN PRI, eight of them have an ESG policy, and only a single one does not mention ESG in its fund documents.

Chart 99: Three Points Compared to Other Efforts



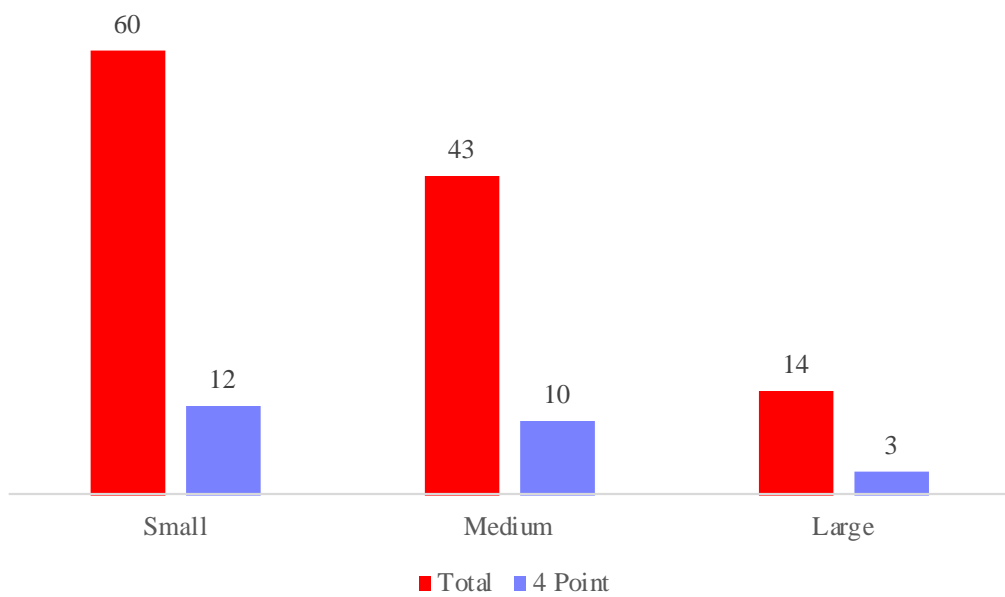
25 asset managers have received 4 points. 12 are from Europe, and 13 are headquartered in North America including 1 from Canada.

Chart 100: Four Points by Region



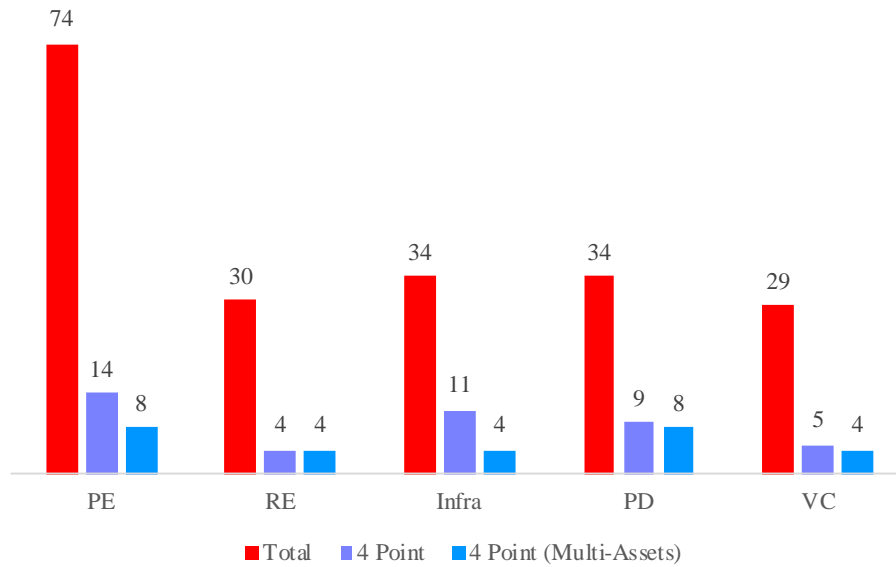
12 are small firms, 10 are medium-sized, and 3 are large ones.

Chart 101: Four Points by Size



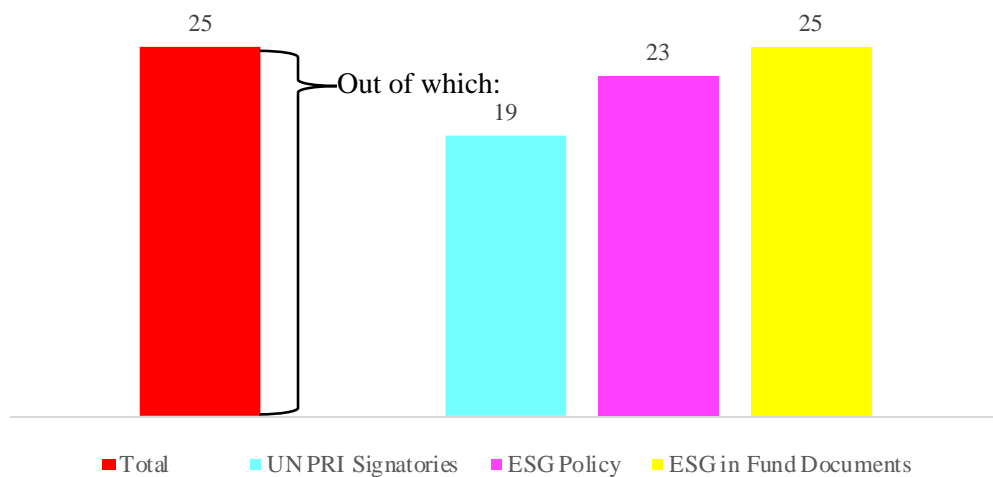
8 out of 14 houses that do PE pursue other strategies, too. All four RE firms look for different opportunities, but only 4 of the 11 Infra companies do the same, like 8 of the 9 PD managers and 4 of the 5 VC firms.

Chart 102: Four Points by Asset Class



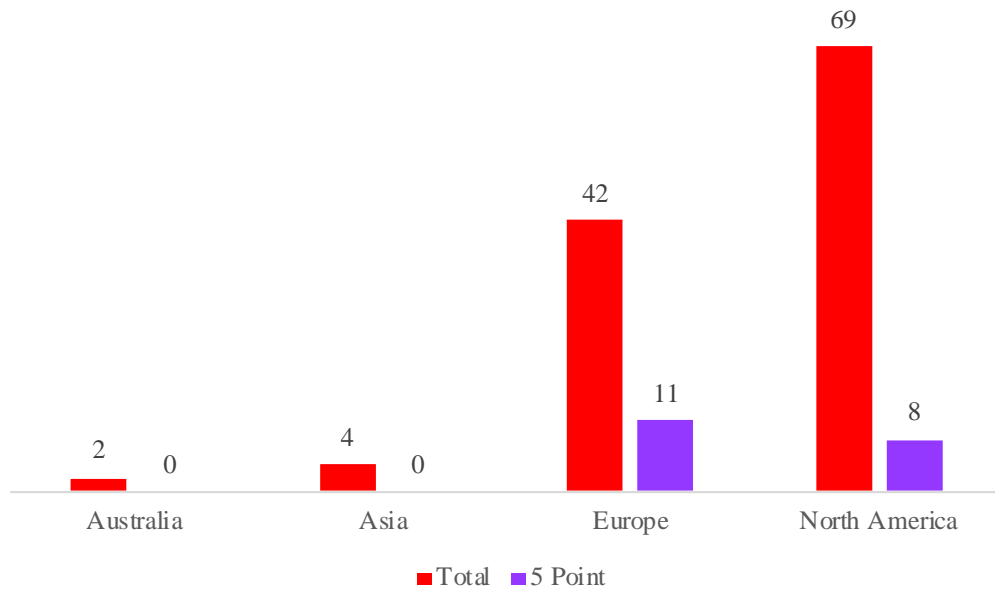
19 of the 25 companies that have scored 4 points are signatories to the UN PRI, except for 2 all of them have an ESG policy, and all of them mention ESG in their fund documents.

Chart 103: Four Points Compared to Other Efforts



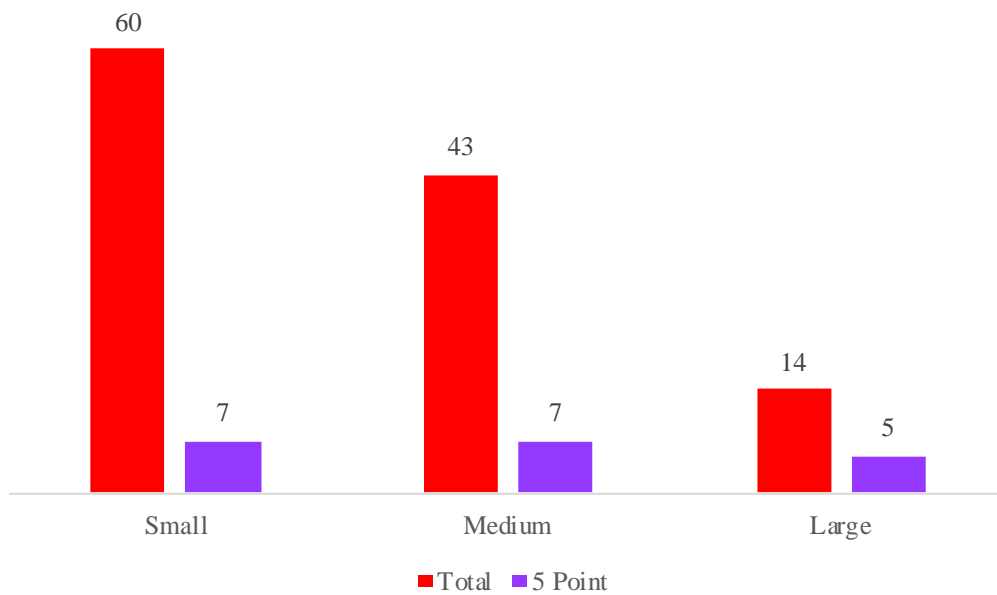
19 PE and other alternative managers have received 5 points. 11 are from Europe, and 8 are headquartered in North America.

Chart 104: Five Points by Region



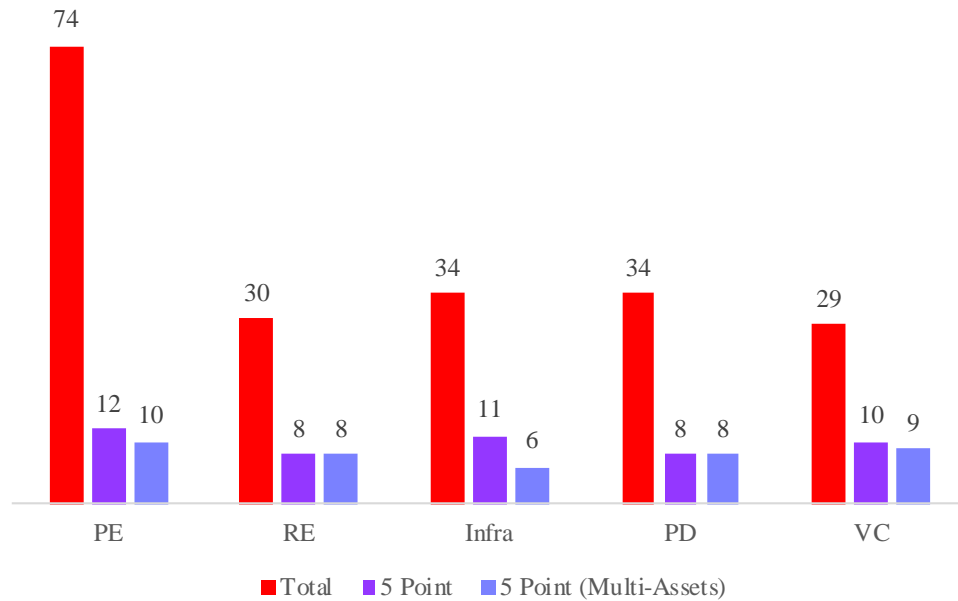
Seven are small firms, seven are medium-sized, and five are large ones.

Chart 105: Five Points by Size



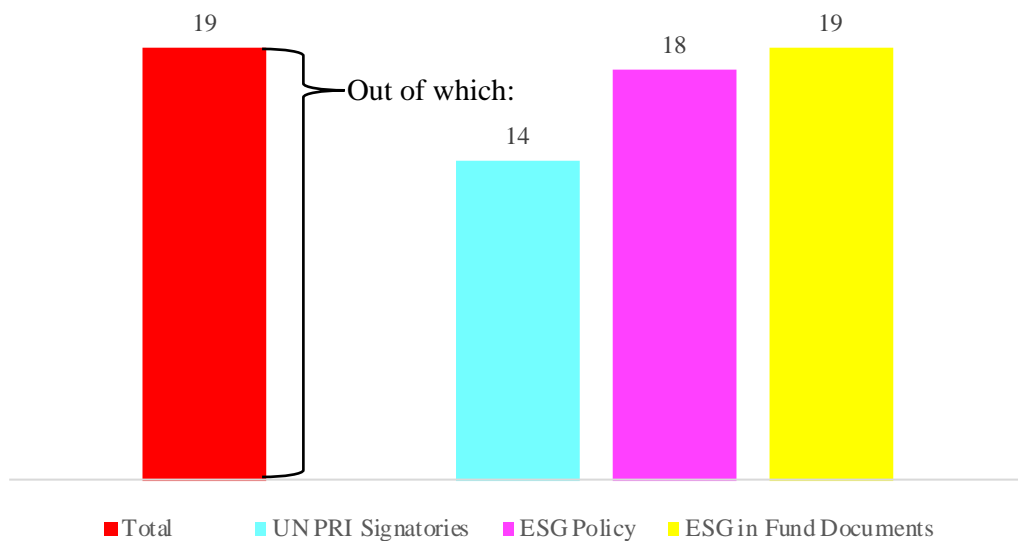
10 out of the 12 houses that do PE pursue other strategies as well. All eight RE and PD firms do the same. 6 of the 11 Infra companies invest in other asset classes. 9 out of the 10 VC managers seek for different opportunities.

Chart 106: Five Points by Asset Class



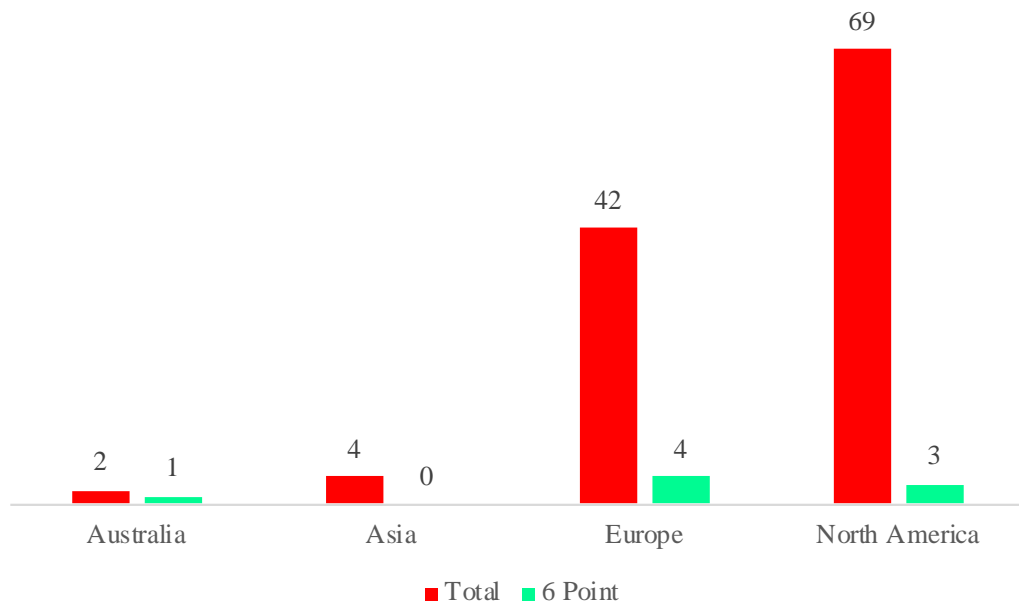
14 of the 19 scoring firms are signatories to the UN PRI, except for a single one all of them have set up an ESG policy, and all of them mention ESG in their fund documents.

Chart 107: Five Points Compared to Other Efforts



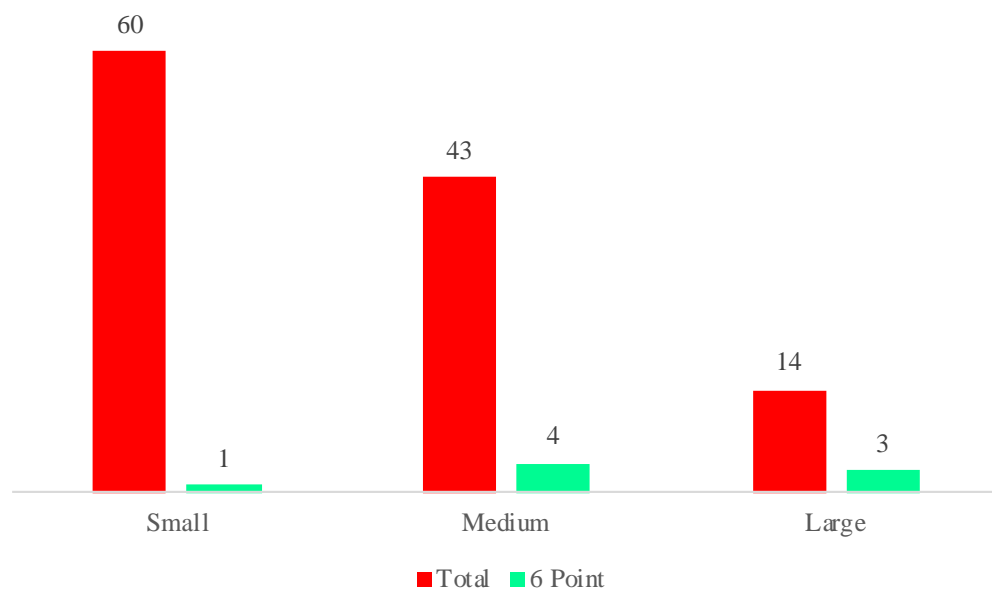
Eight asset managers have received the highest score of six points. One is from Australia, four are from Europe, and three are headquartered in North America including one from Canada.

Chart 108: Six Points by Region



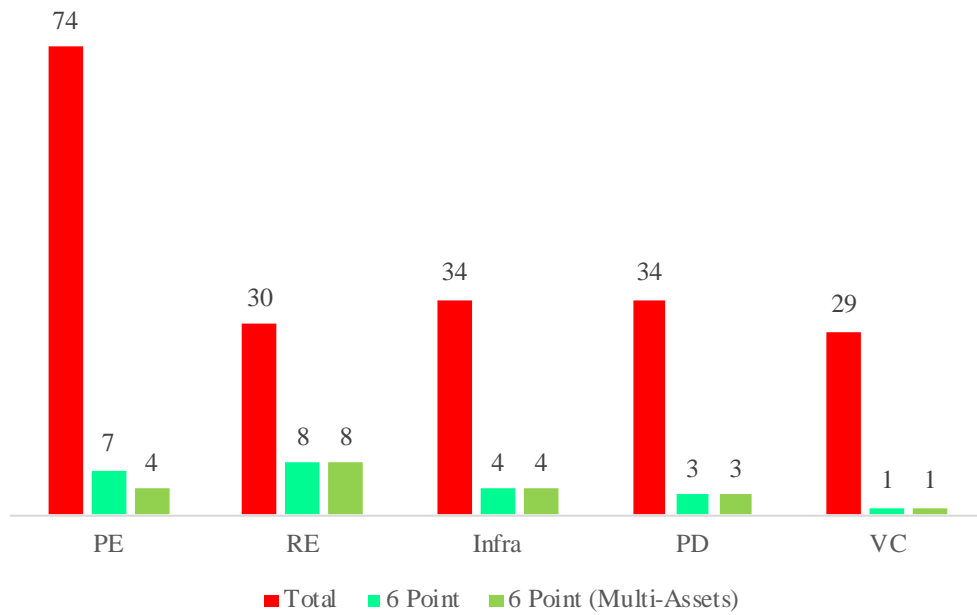
One is a small firm, four are medium-size, and three are large ones.

Chart 109: Six Points by Size



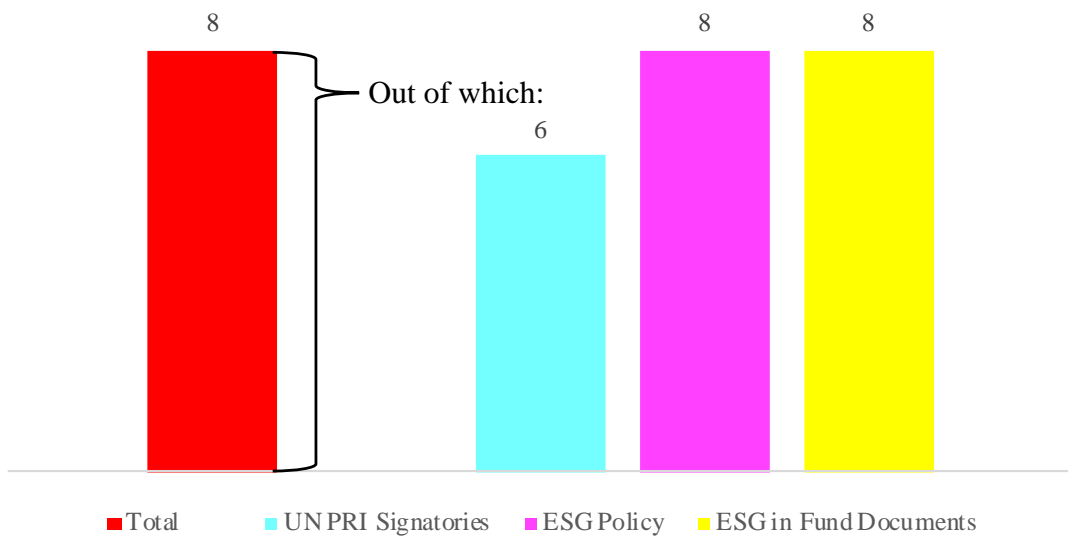
Four of the seven houses that do PE pursue other strategies, too. All eight RE, all four Infra, all 3 PD firms and the only scoring VC manager do the same.

Chart 110: Six Points by Asset Class



Six out of the eight companies are signatories to the UN PRI, all of them have an ESG policy in place, and all of them mention ESG in their fund documents.

Chart 111: Six Points Compared to Other Efforts



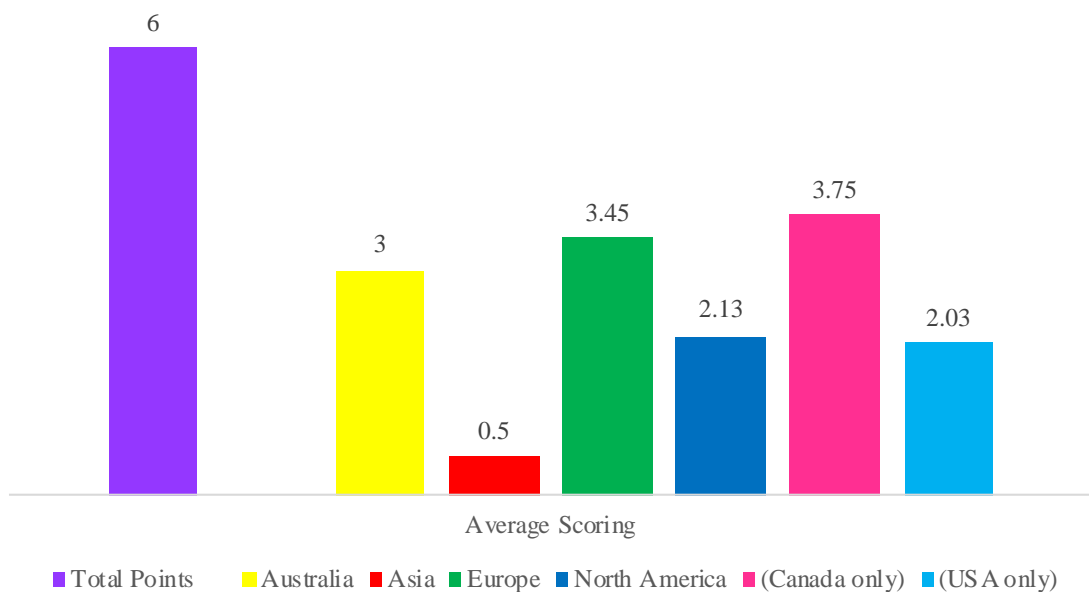
The points-based system confirms that European and Australian asset managers are more ESG affine than those from China or North America, while Canadian ones perform much better than the ones from the USA. The bigger the firms are, the more likely it is that they have a sophisticated ESG approach and pursuing more than just a single asset strategy increases the likelihood as well.

The average score of all 117 PE and other alternative asset managers is 2.56. Although, it is difficult to compare all firms by means of the set targets, considering that they are not built on each other, as some companies fulfill advanced objectives but not automatically basic ones, it can be recorded that in average 42.67% of the set targets are achieved.

4.2.9. Scoring by Different Aspects

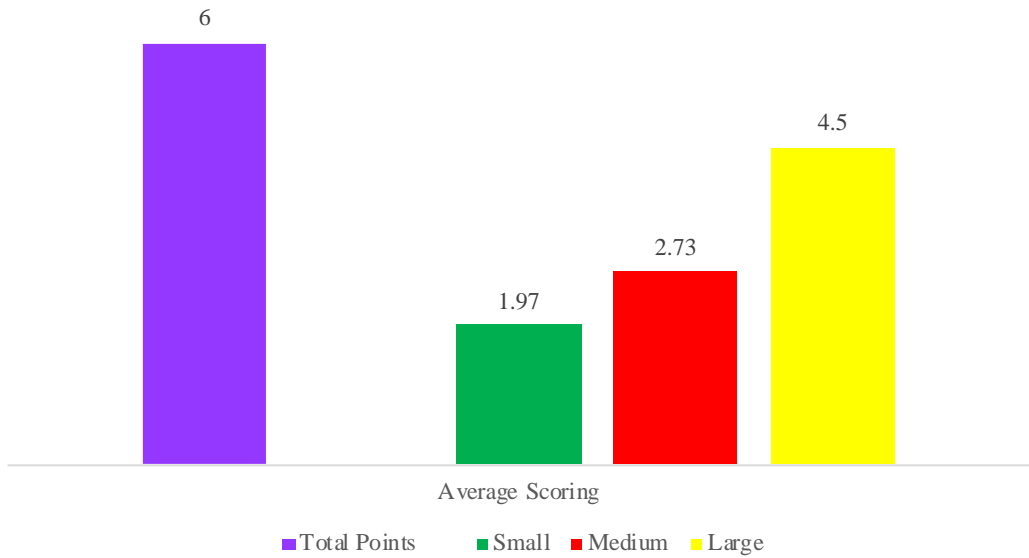
The average score of the two Australian firms is 3.0, of the Chinese ones 0.5, of the European companies 3.45, and of the managers in North America 2.13, while the Canadian ones alone have an average score of 3.75. Just the asset managers from the USA have received 2.03 points in average.

Chart 112: Average Score by Region



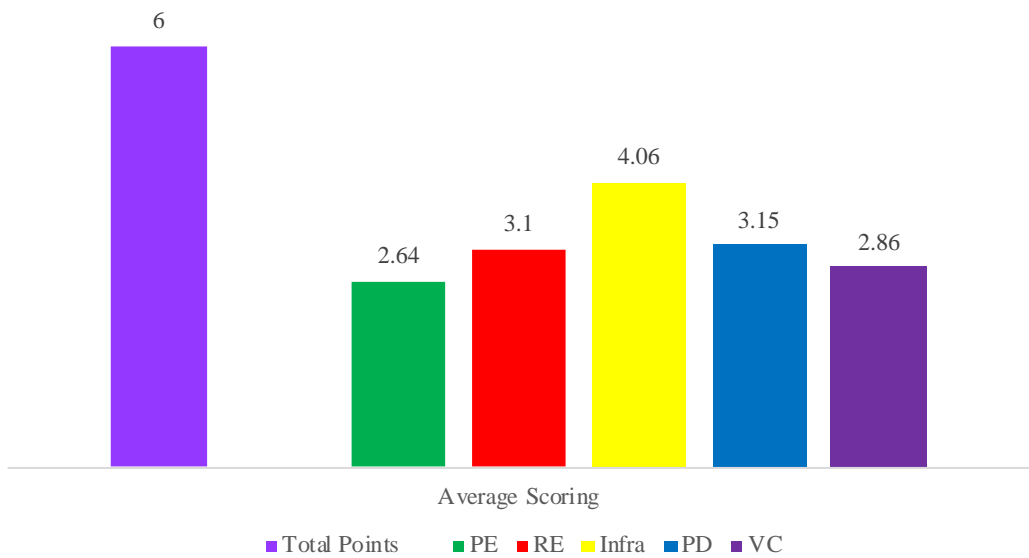
The mean of the small companies is 1.97, of the medium-size ones 2.73, and of the large ones 4.5.

Chart 113: Average Score by Size



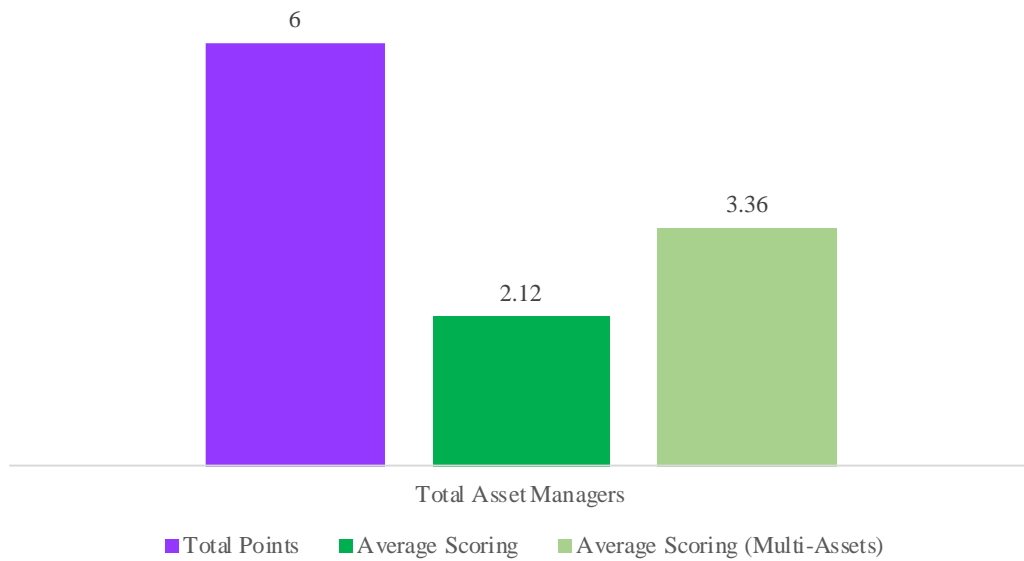
Overall, PE firms receive 2.64 points in average, RE 3.1, Infra 4.06, PD companies 3.15, and VC 2.86.

Chart 114: Average Score by Asset Class



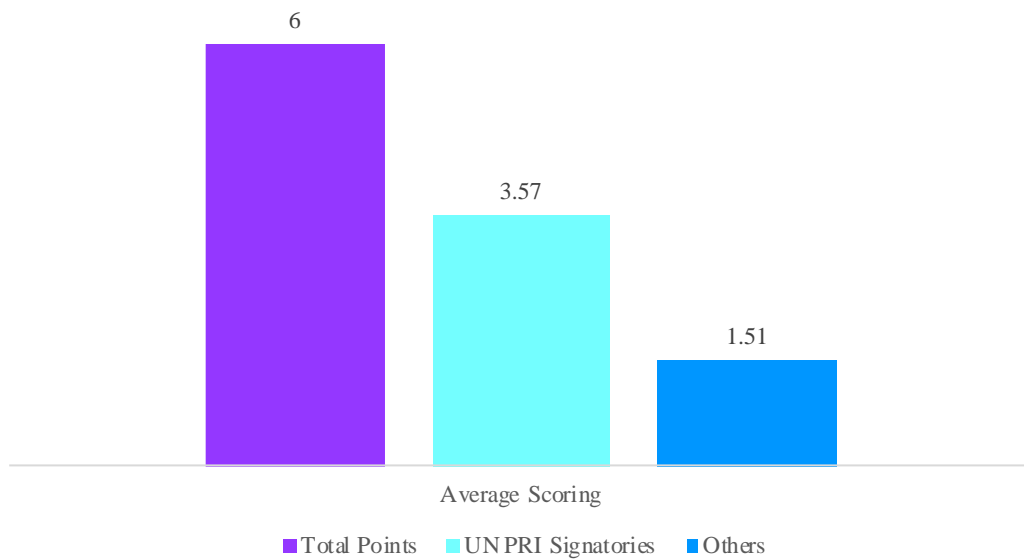
The average score of those PE and other alternative asset managers that pursue different investment strategies is 3.36 while those firms that only look for a single asset class have a mean of 2.12.

Chart 115: Average Score Single Versus Multi Asset Managers



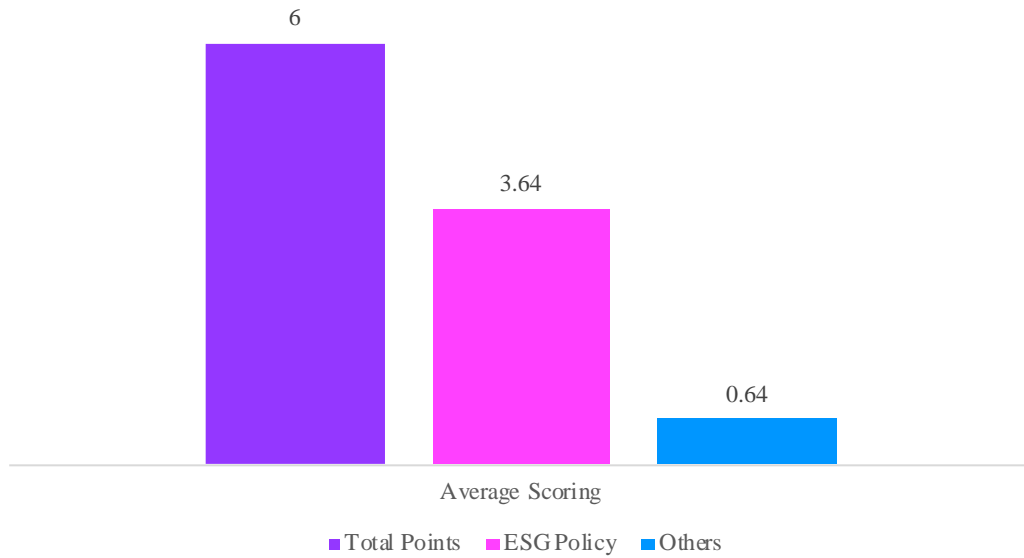
The firms that have signed the UN PRI score 3.57 in average and the others only 1.51.

Chart 116: Average Score of UN PRI Signatories



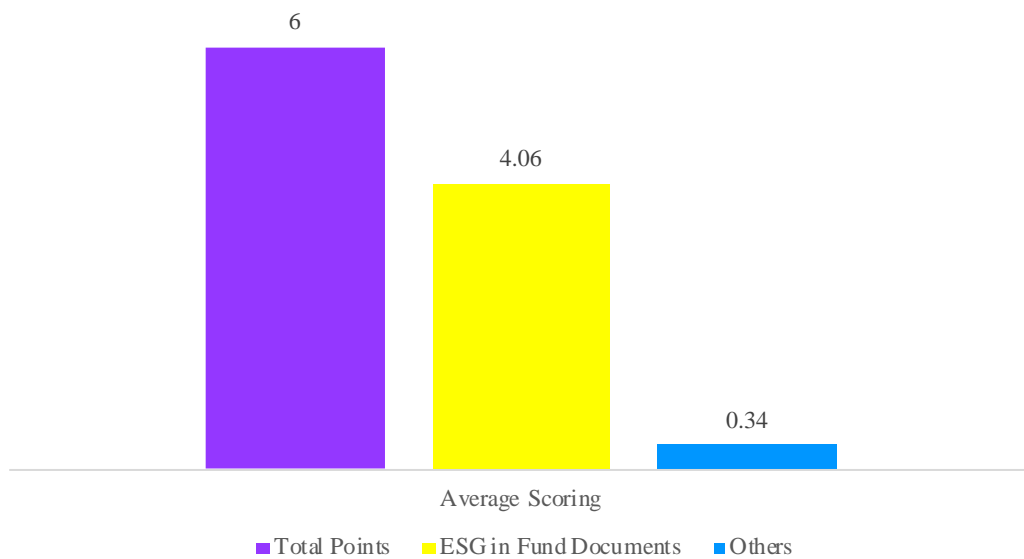
The mean of those companies that have an ESG policy in place is 3.64. For the others it is 0.64.

Chart 117: Average Score of ESG Policy Owners



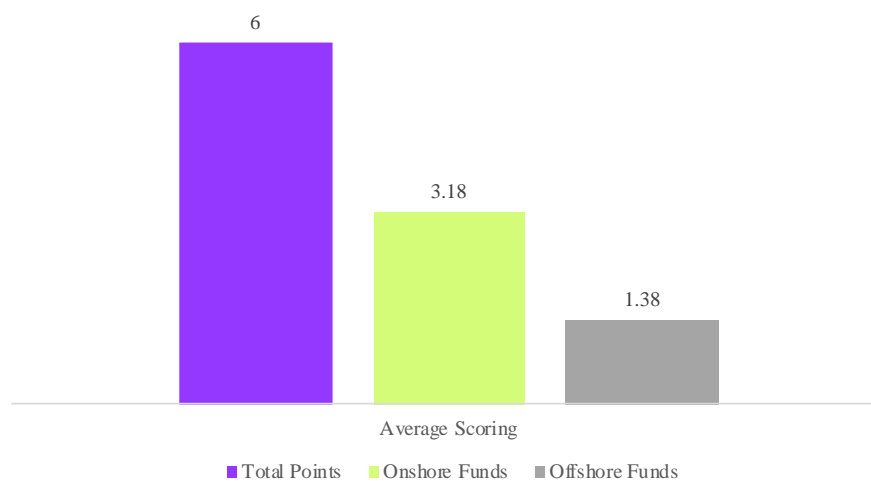
The average score for those asset managers that mention ESG in their fund documents is 4.06, while the rest receives only 0.34 points in average.

Chart 118: Average Score of ESG in Fund Documents



In addition to already confirmed findings that European and Australian asset managers score better than those from China or North America and the fact that size and multi asset strategies have a positive influence, signing the UN PRI is raising the awareness for ESG and affects the firms to increase their efforts. This applies even more to those that are engaged with setting up an ESG policy. The asset managers that furthermore express their commitment in their fund documents receive the highest mean. Considering again the corporate governance of PE and other alternative managers and their fund domiciles, onshore funds have scored 3.18 points in average, while the offshore ones only 1.38. One can therefore argue that there is a link between ESG and the funds being onshore, as this is seen as good corporate governance.

Chart 119: Average Score Onshore Versus Offshore Managers



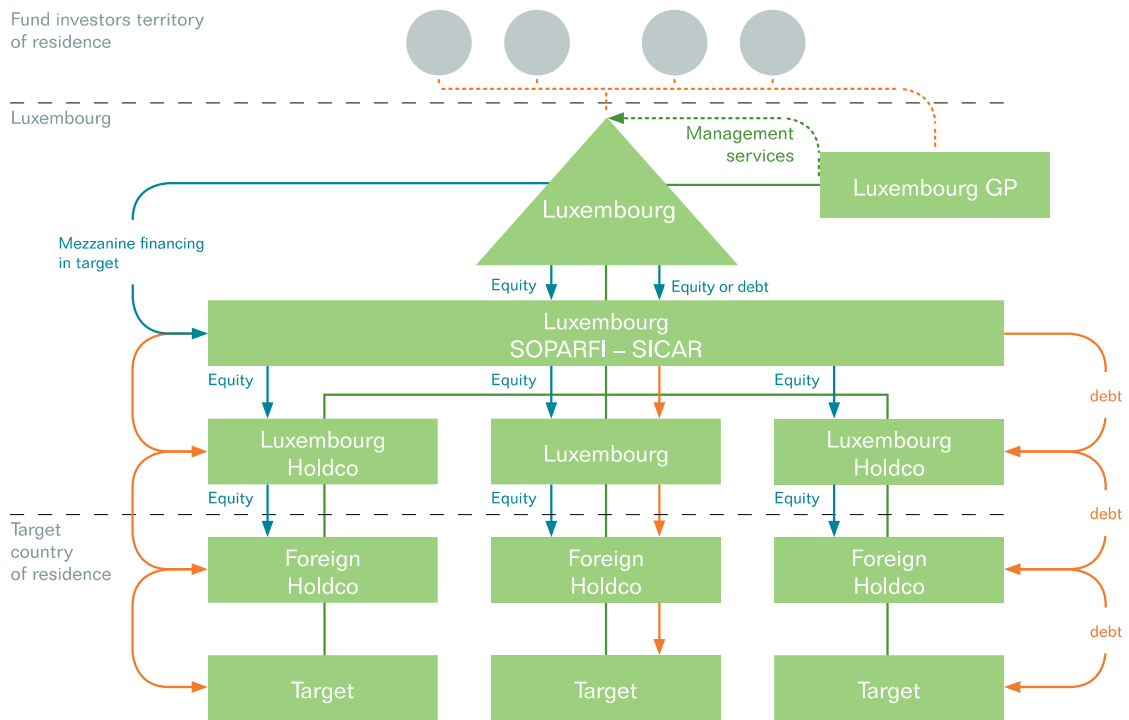
4.3. Funds in Luxembourg

It is not only analyzed if the firms are onshore or offshore but also if they are onshore if they have set up funds in Luxembourg. The country was for a long time focused on the banking sector and on traditional mutual funds, which can be seen as the basis for its expertise and reputation in relation to the financial industry. This might be the reason why Luxembourg has the highest proportion of highly qualified finance people in relation to skills, development, and qualifications worldwide according to the 2015 Human Capital Report of the World Economic Forum¹⁹⁸.

¹⁹⁸ https://reports.weforum.org/human-capital-report-2015/?doing_wp_cron=1588338202.6744599342346191406250#read

13 out of the 20 biggest PE firms of the world are located in Luxembourg, more than 10% of all PE funds are domiciled in the Grand Duchy, and more than 6,000 people are working in the industry²⁰³. Just during the year 2019, 68 new asset managers licensed in Luxembourg, and the AUM of PE funds was growing by 19% year on year²⁰⁴.

Figure 22: Typical Luxembourg Investment Structure²⁰⁵



One can assume with certainty that Brexit has boosted the alternative business in Luxembourg, as the demand for such funds is still growing, funds still need to be marketed in the EU, and the country has therefore become the main location in Europe due to its reputation for quality, services and long-lasting experience with financial products²⁰⁶. One of the first that moved to Luxembourg were Blackstone and The Carlyle Group, two of the biggest asset managers of the world, which also might have caused smaller firms to follow²⁰⁷.

²⁰³ <https://www.boersen-zeitung.de/index.php?li=1&artid=2018193801>

²⁰⁴ <https://www.luxembourgforfinance.com/news/luxembourg-financial-industry-saw-significant-growth-in-2019/>

²⁰⁵ <https://www.alfi.lu/en-GB/Pages/Industry-statistics/Luxembourg>

²⁰⁶ <https://www.privateequitywire.co.uk/2019/09/30/279103/brexit-boosts-pe-business-luxembourg-institutional-demand-funds-continues>

²⁰⁷ <https://www.ft.com/content/72a98d1e-e240-11e6-9645-c9357a75844a>

More than 70 financial institutions have in the meantime relocated from the UK²⁰⁸, which is the highest inflow of all countries. But the Grand-Duchy is not only a well-established place for fund structuring. According to Luxembourg for Finance, an agency for the development of the financial center, the Luxembourg Stock Exchange not only launched the Luxembourg Green Exchange, the first global platform dedicated to green and socially responsible and sustainable securities in 2016, the country has a market share of 31% of responsible investment funds in Europe and is home for over 60% of the European Impact funds²⁰⁹. And the Luxembourg financial supervision is promoting sustainable finance²¹⁰.

Furthermore, in order to increase its efforts Luxembourg entered into strategic partnerships between the government, multi-stakeholders, the private sector, and leading institutional organizations. Initiatives include the Luxembourg Sustainable Finance Roadmap that in cooperation with the United Nations Environment Program establishes a sustainable finance strategy contributing to the Paris agreement, the EIB Finance Platform together with the European Investment Bank to mobilize investments for climate related projects, and the International Climate Finance Accelerator providing financial and operational support to asset managers launching climate action funds. The country also offers quality control solutions by introducing various recognizable labels to eligible investment vehicles like for ESG and impact funds via LuxFlag, an independent non-profit association created in the Grand-Duchy in 2006 by seven private and public founding partners to support sustainable finance.²¹¹

Luxembourg has a clear double objective, to make a meaningful contribution to the fight against climate change, and to establish the country as an international center for climate finance. With the cooperation, the country seeks to enable a legal and regulatory environment and to coordinate promotion and communication.

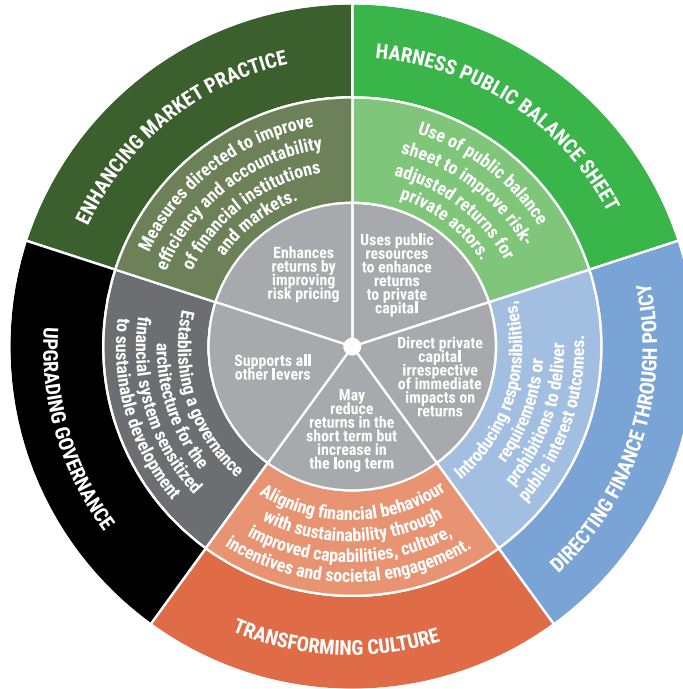
²⁰⁸ <https://www.luxembourgforfinance.com/news/luxembourg-financial-industry-saw-significant-growth-in-2019/>

²⁰⁹ <https://www.luxembourgforfinance.com/en/financial-centre/sustainable-finance/>

²¹⁰ <https://www.wort.lu/de/business/claude-marx-finanzplatz-muss-beitrag-zur-nachhaltigkeit-leisten-5d15cb5cda2cc1784e346e3a>

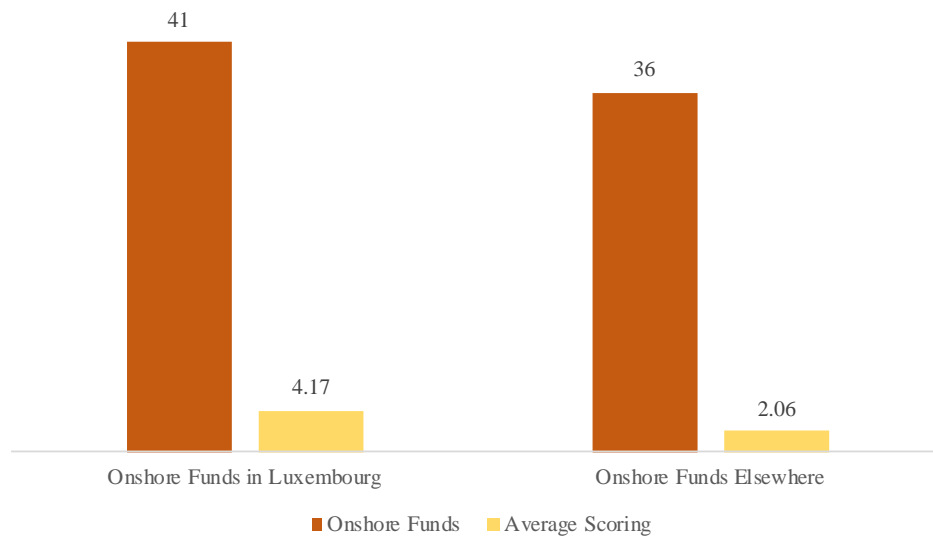
²¹¹ <https://www.luxflag.org>

Figure 23: Five Approaches of the Luxembourg Sustainable Finance Roadmap²¹²



41 of the 77 PE and other alternative asset managers that market onshore funds have such structures in Luxembourg. They score 4.17 in average, while the other onshore locations only receive 2.06 points in average.

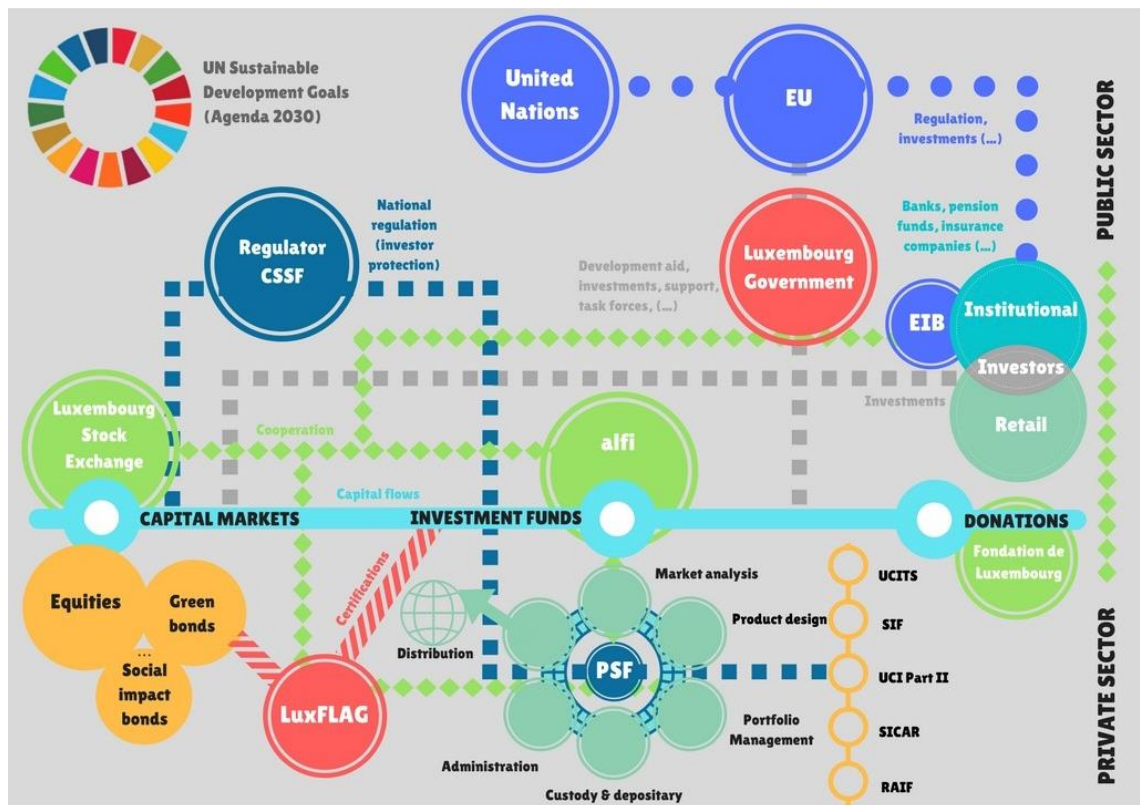
Chart 120: Average Score Luxembourg Versus Other Onshore Funds



²¹² <https://gouvernement.lu/dam-assets/documents/actualites/2018/10-octobre/04-sustainable-finance/Luxembourg-Sustainable-Finance-Roadmap-WEB.pdf>

According to the Candriam ESG report as of 2017, that analyzed 123 countries at all, Luxembourg is ranked worldwide as the fifth best investible country after Sweden, Norway, Switzerland, and Iceland, and Luxembourg was raising since the last publication²¹³.

Figure 24: Luxembourg Sustainable Investing Eco-System²¹⁴



5. Discussion of Findings, Limitations and Future Research

The thesis at hand aimed to present what PE and other alternative asset classes have accomplished so far regarding ESG matters, what they say and what they do. 117 asset managers from 4 different regions, small, medium-sized and big ones have been researched that invest in PE, RE, Infra, PD, and VC. With that it was possible to observe differences and to find out who is already doing well, who is advanced, and who has accumulated needs.

²¹³ <https://www.candriam.com/en/professional/market-insights/topics/sri/candriam-releases-its-2017-esg-country-report/>

²¹⁴ <https://www.luxflag.org>

5.1. Difference by Regions

The move to integrate ESG factors into the business of PE and other alternative asset class managers is progressing rapidly. More and more firms do it and enhance their approaches. The vast majority of all PE and other alternative asset class managers are domiciled either in the US or the EU. An interesting difference in attitude and approach to ESG can be found between the US-headquartered houses and those in Europe, China, Australia. Sustainable and responsible investing seems to be more common among firms with their headquarters in Europe and Australia. In particular, US-headquartered firms tend to focus on realizing value through concentrating on eco-efficiency initiatives. According to the research, US houses are more focused on the environmental aspects of business, in particular, energy and waste efficiency. Such initiatives deliver cost savings from using less energy and water, cutting waste and making production processes 'leaner'. The efficiencies achieved are relatively easy to measure and can be expressed monetarily.

By contrast, European-headquartered firms appear to be addressing a broader range of issues, not just the environmental issues, but the social and governance ones, too. Several companies describe how they are working with their portfolio companies to improve the way they manage social matters like labor issues in supply chains, health and safety, and employee management. In these cases, the benefits are intangible, for example increased morale for productivity and retention, attracting new staff and customers, and enhancing reputation and brand. A lot of the US-headquartered firms mention that social issues are 'on their radar' and acknowledge that they will be considered in the near future. The large ones just recently have addressed diversity and inclusion. Clearly, it is in the USA where the potential for ESG investing is greatest. Another cultural difference is that US firms are more focused on CC by supporting communities either via active help by their employees or donations or by supporting veterans via various initiatives. Even if many companies think that they already view social and governance matters as important and that this issue is already well managed, it seems that social and governance factors are more advanced at European-headquartered firms. Many of these companies have their headquarters in the UK.

Most likely, the UK Bribery Act as of 2011²¹⁵ has deepened the firms understanding of how to manage bribery, corruption and ethical risks. As a result of their recent efforts to comply with the law, many firms are now equipped with better quality and risk management. Further, the vast majority of the European managers have already left offshore domiciles and went onshore.

5.2. Difference by Size

Another difference exists between smaller, medium-sized and large asset managers. Though, it is understandable that smaller companies have a smaller workforce and a leaner set-up and do not have the resources yet to implement ESG factors. ESG measures take money and time. And increasing value by ESG improvement requires specific human capital, which, in particular, smaller firms might likely still be in lack of.

According to fund documents, some companies employ ESG teams of up to ten people and received dedicated advice from advisory firms to set up their ESG strategy, which might even be too costly for smaller firms. However, some smaller asset managers sometimes seem to think that ESG could be a differentiator and have addressed ESG already irrespective of the efforts it requires. And in addition, considering that most asset managers in general grow over time with always bigger funds than the previous one, one could assume a certain likelihood that the ESG integration will follow.

5.3. Difference by Asset Class

Different investment strategies also seem to vary how they tackle ESG. According to the data found, Infra managers pay more attention than others. By nature, investments into energy, transport and logistics, environmental, and social sectors require ESG factors in particular, as those sectors are inherently ESG affine. RE investments also show a high degree of ESG affinity, as any kind of building provides multiple possibilities, in particular, in relation to environmental improvements via reducing emissions, sustainable water circulation, clean energy, which apply before the investment is made and during the property management period. VC managers, although in general they only acquire a minority stake in target companies, which gives less control, seem to take it seriously.

²¹⁵ <http://www.legislation.gov.uk/ukpga/2010/23/contents>

This might be the case because of the nature and philosophy of the VC industry, which is considered as modern, hip, following trends, and most of the target companies are set-up by younger people who are more ESG affine than older ones. And beginning of 2020, more than 20 European VC firms have agreed on a binding investment clause that shall commit any newly acquired portfolio companies to develop sustainability and to protect the climate, in particular, like measuring CO₂ emissions, implementing reduction measures, adjusting travel policies and sensitizing employees, partners, suppliers, and customers.²¹⁶

PE firms however show the lowest enthusiasm. This could be explained with the facts that 60% of the companies are located in the USA plus three in China, and 40% of them are small firms. This is the highest share for in both of these datasets. In addition, almost 50% of the PE houses are single asset managers. The observed high attention by PD comes with a little surprise. When they provide funding to transactions or invest directly, such funds are in most of all cases just the co-drivers and the equity provider or the target company is in the lead. The financing of consolidations, recapitalizations, and loans and bonds do not provide significant influence, too. However, as PD managers are not well suited to engage in shareholder activism during the investment holding period, they might therefore ask for ESG integration from the beginning before they even invest. Another explanation could be that 85% of all asset managers that pursue this strategy invest in multi-asset classes. ESG considerations are higher for those than for single-asset investment firms. Looking for different investment opportunities raises awareness for ESG. This can be explained with the fact that the asset classes also have slightly divers risk profiles and needs. Furthermore, launching a second or even third asset class also comes with the growth of the firm, which again enables the managers to allocate resources to the ESG commitment.

5.4. Difference by UN PRI, Policy, and Fund Documents

The growing number of signatories to the UN PRI, which involves a full range of principles in relation to an economic and financial framework, is an indication that not only the finance industry as such but also the alternative one is enhancing its ESG efforts.

²¹⁶ <https://www.handelsblatt.com/technik/it-internet/digitalkonferenz-dld-deutsche-wagniskapitalgeber-verpflichten-sich-zu-mehr-klimaschutz/25449354.html?ticket=ST-213908-xvj9i3RgetPSicZC0ska-ap2>

And when an asset manager thinks about becoming a signatory, it has already considered what it is, and what the benefits are. In other words, a first step has been made on which can be built. This is why the signatories of the UN PRI are much more advanced than those who have not done it. The next level, which is in a lot of cases accomplished at the same time when asset managers become signatories, is the set-up of an ESG policy that is specifically tailored to the objectives and requirements of the company. It includes what ESG means for the firms and how it shall be put into action, the DD process, screening, shareholder activism during the investment holding period. Of course, some companies only have started or have a light policy that describes ESG only vaguely. But again, even if so, the next step is made, and the DD process, screening, and shareholder activism can then be tackled in the fund documents. ESG implementation is then finally fully accomplished when all efforts by the PE and other alternative asset managers are measured and reported.

5.5. Results in Relation to Existing Literature and Previous Research

Previous academic and industry research has revealed certain main and core statements, which can now be verified again. The first one was that differences exist between locations. This is confirmed. But even further it was found out that PE and other alternative asset managers, which are headquartered in Europe and Australia have accomplished most in relation to ESG followed by North American companies and Chinese ones. This might be caused by various perceptions of sustainability and responsibility as well as by cultural differences.

Another observation was that larger asset managers are more likely to integrate ESG. Indeed, the bigger a firm is the higher is the probability of a more advanced approach. The reasons are obvious. With its growth, a company is able to allocate more human and / or financial resources to either provide inhouse support or to pay for external advice. And in a lot of cases it goes hand in hand with a general expansion of the business activities like for example launching another asset class, which then again makes it more likely that ESG is implemented. It was previously reported that Infra managers have a more sophisticated ESG approach than others. This is clearly the case, because their typical investments into the energy, transport and logistics, environmental, and social sector require a certain understanding.

It is a predisposition for sustainable and responsible investing. And any inherent risks might even affect infrastructure assets much more than others. But beyond that, it was identified that PD is the second-best asset class followed by RE, VC, and PE.

Signing the UN PRI was considered as an advantage for good ESG integration. This is true. However, the full extent of the influence is significant. Asset managers that adhere to the framework and guidelines have an ESG approach that is more than two times better than for those who have not signed the UN PRI. The awareness might have been raised before, but being a signatory not only obliges the firms, it also provides a lot of guidance for further improvements.

It was also found out before that a majority of the alternative asset managers has an ESG policy in place. The exact number was varying subject to the researched samples. The thesis at hand examined 76.2% of the alternative industry, which can be considered as valid and reliable. 75 of the 117 firms have an ESG policy in place, which is 64.1%. The details of such written commitments might vary, but this thesis went further and investigated if it is just a stand-alone matter or if it has encouraged the asset managers to take the next steps like putting it into the fund documents and if they have transferred the content for example into the investment decision-making process.

That the latter has a meaningful impact was told already by previous literature and industry research. However, it was not disclosed how it is done by PE and other alternative asset managers. One has at least to differentiate between an implementation into the DD activity and any kind of screening, which was reported by earlier studies, too. But it is finally about what consequences it has for investment decisions. It can be just a check-the-box exercise, but a screening can exclude certain types of investments. Furthermore, red flags can be found and if seriously considered abort a potential transaction. And even if all that is done, is it up to the asset manager to decide how and when, and it is clearly to be stipulated in the fund documents.

Of course, ESG during the holding period of portfolio companies enables value creation. Amongst others, it fosters innovation, manages risks, and increases reputation. This is not a fairly new aspect. However, the thesis at hand found out if PE and other alternative asset managers are really helping via shareholder activism, how many are doing it, where they are located, what size they have, and what asset class is more advanced than others.

Disclosing ESG efforts and their advantages can for sure affect valuations positively. A potential investment is seen as less risky, and it was revealed that in some cases a price premium was paid for such companies. But the disclosure has the same issues as the previously covered challenges when it comes to measuring and reporting of ESG. A common agreed definition does not exist, and the same counts for a standard of integration. Furthermore, several frameworks and guidelines exist, but an industry-wide approach that is applicable for all asset classes and accepted is not available. None the less, it was investigated that some firms already measure and report their efforts.

The two last core statements of previous research go hand in hand. Actions by industry leaders cause followers, and ESG integration will increase in the future. Both is true considering the improvements measured by this thesis just in one year. Alternatives is a fast-moving sector. They do investments quickly, and they adapt just as fast when it comes to new developments that are either necessary or that provide benefits. It has also been observed how quick other asset managers have followed the big ones when they have moved to Luxembourg as new fund domicile. Finally, it is only about one common goal, to create value!

5.6. Limitations

While the sample of the European and North American asset managers is big enough and divers and can thus be considered as reliable and valid, the number of Australian and Chinese managers is rather small, and it can therefore be questioned if their analysis provides a true picture of the industry in these regions, even if it is supposed that the alternative industry in such countries is rather small and considering that it reflects the listings of PEI and Preqin. A further limitation of the thesis at hand is clearly that it was not completely possible to assess the ESG commitment by means of the different asset classes, as ESG strategies once implemented apply firm-wide and cover all of them. Too many firms are multi-asset managers, which, in particular, applies to the medium-sized and large ones.

Furthermore, this thesis can only provide insight what PE and other alternative asset managers do, what they have accomplished but not how they do it. The details of the ESG integration and, in particular, of the DD process, for example how deep it goes and what aspects it covers is not available.

This would require the analysis of the DD material and the assessments, and in order to receive a significant sample, one would need to research a high amount of such documents of a certain high number of asset managers. The same applies to the shareholder activism period, the holding period of the investments, how ESG is implemented into the business model of the portfolio companies. In particular, in those cases where the need for an ESG turnaround was identified in the DD process and should be implemented during the investment holding period, data is not available to provide an evidence that this was in fact done and to what extent.

This thesis has found out that in general ESG is being introduced but is not able to reveal the details as well. In this regard, one has to consider that this process is at least subject to the industry sector, the size of the company, and the region it operates in. And finally, the industry is changing very quickly. Asset managers that have not dealt with ESG a year ago do it now, and others that had only a light approach have now a more advanced one. Looking at PE and other alternative firms in a year or even in five years might provide a different picture of the industry.

5.7. Future Research

There is ample of scope for future research to consider what PE and other alternative asset classes have accomplished so far in relation to ESG. It was possible to identify the benefits, why ESG should be implemented. However, a few asset managers do not yet deal with it or just have a light approach. Future research could find out why this is the case, if it is just due to time and cost constraints and the lack of resources, or if they are currently considering the set-up. The exact DD process of the asset managers could also be a topic for future research, for example how deep it goes and what aspects are covered, and the same applies to the holding period of the investments and, in particular, to those companies that had an immanent need for ESG improvement. It would be worthwhile knowing if and how such a turnaround would be achieved.

A further interesting aspect would be for sure to analyze in depth why the differences between the USA, Europe, Asia, and Australia exist, and if it is really just the culture and on what it is based. But it was already noted that at least the US managers are catching up a little bit, and the whole industry is constantly changing maybe also because those who do not apply ESG yet follow those who do.

The alternative industry enhances its ESG efforts in general, and the landscape does look different year by year. It would therefore be of interest to see what PE and other alternative asset managers would have accomplished in one year or maybe in five. This can also be accelerated by the introduction of regulatory and legal measures. It is to be seen if policymakers are to speed up the process. And of course, the difference in asset classes can be further investigated, the details of the ESG integrations be in the DD process or the holding period of the investments.

When looking at all PE and other alternative asset classes altogether, a considerable amount of asset managers has already addressed ESG matters and the number is increasing compared to the status quo of the previous years and approaches also seem to become more comprehensive. Some leading traditional investment firms even now go one step further and have created ESG funds.

The world's largest fund management company, Blackrock, recently accomplished that it is now required to consider environmental, social, and governance criteria in the investment decision-making process,²¹⁷ and now PE giants like Bain Capital with its Double Impact Strategy²¹⁸, Goldman Sachs with its Social Impact Fund ²¹⁹, Kohlberg Kravis Roberts with its Global Impact Fund²²⁰, Morgan Stanley's PMF Integro Fund²²¹, LGT Lightstone²²², Partners Group PG Life initiative, a strategy focused on SDGs²²³, and TPG with its Rise Fund²²⁴ are targeting alternative impact funds²²⁵. Also, industry heavyweight Blackstone is launching an impact investing platform²²⁶.

²¹⁷ <https://www.blackrock.com/corporate/literature/whitepaper/viewpoint-investment-stewardship-ecosystem-july-2018.pdf>

²¹⁸ <https://www.baincapitaldoubleimpact.com>

²¹⁹ <https://www.goldmansachs.com/insights/impact-investing/touts/fact-sheet.pdf>

²²⁰ <https://www.kkr.com/businesses/global-impact>

²²¹ <https://www.morganstanley.com/press-releases/morgan-stanley-investment-management-raises-more-than--125-milli>

²²² <https://www.lghtlightstone.com/en>

²²³ <http://pg-impact.com>

²²⁴ <https://therisefund.com>

²²⁵ https://www.privateequityinternational.com/kkr-to-join-growing-band-of-impact-investors/?utm_source=Sailthru&utm_medium=email&utm_campaign=15-02%20KKR%20impact%20alert&utm_term=PEI%20Alert%20Smart%20List

²²⁶ <https://www.blackstone.com/the-firm/press-releases/article/blackstone-launches-impact-investing-platform>

Again, driven by investor demand, this fairly new approach even goes one step further than just integrating ESG factors into fund terms, into the investment processes, and the holding periods. LPs already recognized that there is no tradeoff between return and positive impact, and therefore have an increased demand for even more enhanced products that can deliver both.

In general, the named asset managers interpret impact investing as helping mission-driven companies to address a range of pressing social challenges to scale and drive change to deliver both a competitive financial return and meaningful, measurable social and environmental good. Such target companies are solving critical social problems and do so with sustainable business models, and they are not only located in North America or Europe but also in emerging markets. Potential portfolio companies are sustainable as such or use or work on sustainable technologies, improve health outcomes, promote education and workforce development, provide affordable housing, foster financial inclusion and microfinance, and neighborhood serving retail.

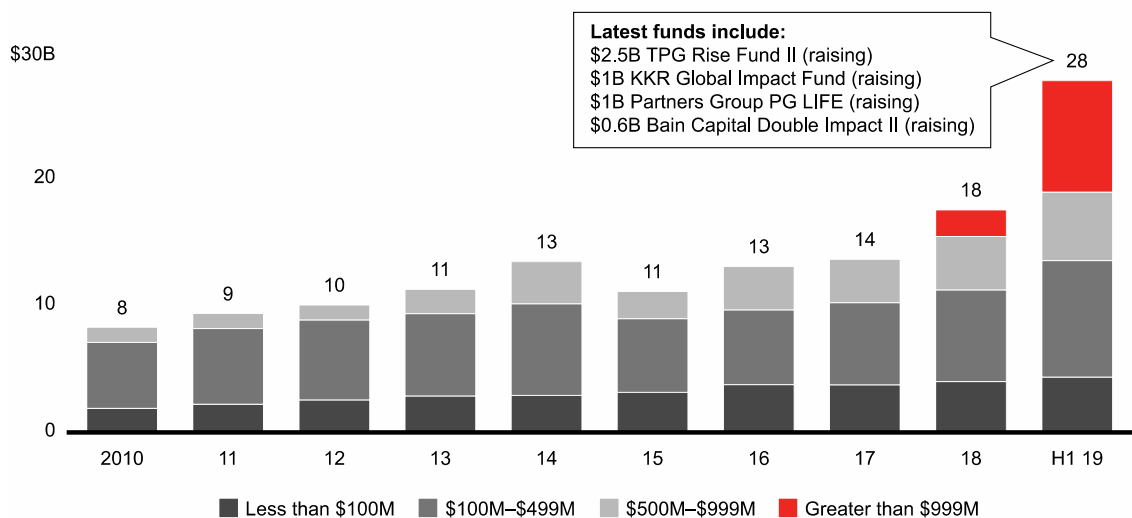
A few of these funds even try to identify companies that measurably contribute to solutions addressing the SDGs and others are not only focused on growth or leveraged buyout investments but seek for opportunities in RE, Infra, and PD, too. Investments include amongst others care provider, housing for individuals with disabilities, 100% plant-based and other sustainable restaurants, recycling firms, talent fostering companies, and health companies that are focused on new treatments. Integrating the enhanced approach into fund terms, the investment processes, and the holding periods is done as a matter of course. The rise of impact investing has already caused some to call it a new or an asset class in itself, but this might dodge the fact that even any existing asset class can make and have an impact when it properly addresses ESG to its full potential.

Kohlberg Kravis Roberts exceeded the USD 1 billion fundraising goal for its Global Impact Fund²²⁷, but the most prominent strategy was set up by major alternative firm TPG, which is called The Rise Fund that was set up in 2016 together with Bono, lead singer of rock-band U2, and Jeff Skoll who was the first employee of eBay and its first president.

²²⁷ <https://www.bloomberg.com/news/articles/2019-08-07/kkr-tops-1-billion-fundraising-goal-for-global-impact-fund>

Former US Secretary of State and 2004 democratic presidential nominee John Kerry recently became an advisor to the fund. The company is currently launching the second fund and is aiming to collect USD 2.5 billion, which would be the biggest alternative impact vehicle to date. Together with its advisors, this fund has set up a methodology to estimate the value of its investments, the impact multiple of money, which is a qualitative analysis of companies with a social purpose or output, that are the activities produced or delivered by the investment, together with an expected minimum social return of USD 2.50 for every USD 1 invested.

Figure 25: Total AUM of Dedicated Impact PE / VC Funds²²⁸



Although the impact funds of such asset managers are still not comparable in size with others they have raised before, commitments to successor ones increase significantly. Alternative impact investing can therefore be seen as a trend of the future, which would be of high interest to be researched in the future.

6. Recommendations

So far, it has mainly been researched why the industry should be compliant, how it can achieve it, what the advantages are and that the industry in general is keen to enhance its ESG efforts but not what PE and other alternative asset managers have accomplished in relation to ESG, what they really do and what not.

²²⁸ <https://www.bain.com/insights/year-in-review-global-private-equity-report-2020/>

The previous attempts to find it out analyzed either a small sample or were focused on a narrow dataset like the place of location. The context of the UN PRI, dedicated policies and fund documents have not been analyzed yet, nor have they been pulled together with the location, the size, and the different asset classes of the investment managers.

More and more firms implement ESG practices and enhance their approaches. The reason for all this is that sustainable and responsible investing creates value, increases financial performance, reduces risks, and finally outranges the costs associated in the present versus the long term. Investors are favoring companies that apply ESG principles. ESG performance is becoming material to fund documents as well and even a condition for attracting investors. One example that was found during the research was that if a fund fails to report to the expected level or fails to meet an agreed-upon ESG objective, the investor reserves the right to suspend capital commitments. Although, the motivation behind the implementation of ESG, being creating value, increasing financial performance, and managing and reducing risks, is not a surprise, it highlights that more and more asset managers acknowledge the clear benefits for the advantages for their business. ESG is providing profits by making money and saving money. But it seems that sustainable and responsible investing has not yet utilized its full potential. The approaches of most of the companies still differ from firm to firm. A common industry-wide agreed approach is still a dream of the future.

6.1. What Hinders the ESG Integration

There are several reasons that hinder the introduction or the enhancement of ESG in PE and other alternative asset classes. Stakeholders have many different demands. Customers seek for low prices but high quality, employees for high salaries and good working conditions, investors for low risks and premier returns, and society at large for high environmental, social and governance standards. It is very difficult to set up common detailed guidelines that can be generally applied to all asset managers and portfolio companies. Everyone requires that companies specific ESG matters are identified, which have an impact. The investment universes of all PE firms are just too broad because of all kinds of technologies, retail and wholesale. But the conditions for an implementation are better than for listed firms or companies that are owned by many shareholders compared to alternatives investments that hold in a lot of cases a majority of the shares.

PE acquires in general a majority stake and could through shareholder activism facilitate the application of ESG practices. But it is not only about different sectors.

Differences also exist by country, region, and development stage. If one considers all different asset classes with RE, Infra, PD, VC, it is clearly an image of the global economy. In addition, alternative managers, which are in general lean organizations, need to allocate human and capital resources to set up their ESG approach, which is a challenge for smaller firms. However, the same applies to the portfolio companies as well, be it by setting it up or improving it, and it is dependent on the development stage, too, and the current economic situation they are facing. This might not always be an easy task, for example considering corporate control mechanism and reporting standards. Only larger industrial groups or delisted firms might be able to allocate necessary resources.

Another constraint is that ESG ratings and companies that provide it, assess it, and monitor it, are available for mutual funds but not yet for alternative ones, but even them in most of the cases come to different assessments for the same evaluated entity. Lastly, the different main regions where asset managers are headquartered, USA, Europe, Asia and Australia, face discrepancies how they view their ESG engagement. It is likely but it is to be assessed if these are only cultural differences.

6.2. ESG in the Investment Process

The first important step is however to implement ESG guidelines into the deal origination process and then into the transaction and investment process, into the DD. It starts with raising awareness at the level of the asset manager, which can be an internal process or initiated by investors, but it requires in any case the agreement of the senior executives and then needs to be imparted down to the associates of the investment team. But even support processes have to be covered, not only front office but middle and back office, too, investor relations, legal, finance, human resources, controlling, compliance, etc.

The first question to be answered is how the implementation can be put forward either by a dedicated staff member or even a team, or if the firm uses external consultancy advice. Not only in case of an internal solution, inhouse training, recognition, and rewards have to be implemented.

The next step would be setting up an internal ESG policy or at least some parameters the company can comply with in order to identify risk and opportunities for different sectors, regions and if necessary, development stages so that the asset managers can determine how to get the most value from the ESG assessment.

Negative and positive screening factors are to be developed, and existing anchor investors can advise on their perception. Decisions have to be made if red flags are a valid reason for an abortion or if not, what mitigations might exist. Once defined, this evaluation has to be transferred into the fund documents, in particular, the PPM so as to make it compulsory.

For the investment process as such, it is then to be assessed if negative or positive screening does apply that either excludes a potential target or favors it. As the next step, KPIs of the target companies need to be identified already in the pre-deal phase. In relation to environmental matters, a non-exhaustive list can start with potential contaminations, hazardous substances available, how energy or resources efficient the target is, the assessment of greenhouse gas emissions, and relevant planning of operational and capital expenditure.

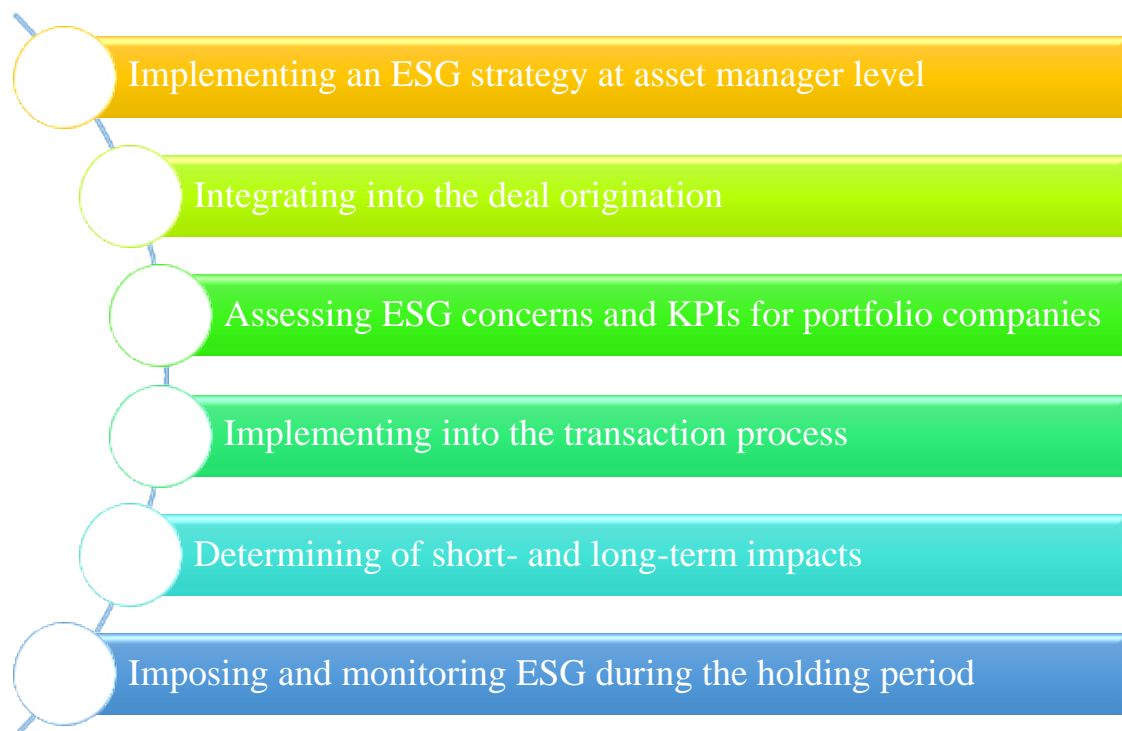
Social aspects can include occupational accidents, trainings and qualifications, employee turnover, diversity of the workforce, and social engagement. Corporate governance can for example imply reporting to stakeholders, corporate policies and code of conduct, quality management, and compliance with laws and regulations.

If red flags are found, it has again to be decided if they are valid for an abortion or if not, what mitigations might exist. Such mitigations can include the potential for a turnaround during the holding period. One can argue that this would never be possible if one would exclude such investments from the beginning. It has also to be assessed if the target company already has some kind of ESG considerations in place and what concerns are addressed. But even if no red flags are found, the ESG parameters of the asset manager and the company's specific KPIs need to be considered in the next phase of the lifecycle, the holding period.

If anything is missing, for example an own ESG policy at portfolio company level, the asset managers, in most of the cases owner by majority, has to make use of its most powerful tool, shareholder activism, and identified KPIs need to be implemented.

If the alternative firm does not have sufficient voting rights, it can still use its advocacy as financial sponsor. Therefore, an ESG strategy has to be developed as a basis for any implementation work. It starts with defining the organizational structure, the company's governance structure in relation to sustainability and responsibility, so that it is embedded into all levels from energy and waste management, to human resources and corresponding trainings, to the assessment of opportunities and risks, and finally to the monitoring. Products and / or services including distribution channels need to be aligned, and efforts be disclosed.

Chart 121: How to Develop a Full ESG Strategy



However, when ESG matters are implemented such efforts need to be aligned with the strategy and operations of the company in order to avoid tradeoffs between financial and ESG performance, so that improving one of them does not come at a cost to the other²²⁹. It is therefore essential that necessity, feasibility, and opportunities are analyzed in detail.

²²⁹ Eccles R., Serafeim G. (2013)

6.3. ESG Measurement

Most of the KPIs also have a cost side. It can increase financial performance, like for example reduced costs for energy or for insurances or employees. But, in a lot of cases ESG and its value can still only be considered as intangible assets, which are sometimes referred to as intellectual property, brand recognition or goodwill²³⁰. These are general terms used to describe assets such as brands, patents, licensing agreements, technology, customer relationships, employee know-how, community goodwill, reputation, but these assets are hard to measure in real value and often compete with those that are easier to assess. ESG programs have the potential to touch all these areas and create value in many ways that would not generally appear on the balance sheet.

However, the success of a firm has been measured only by its financial performance for too long. Non- or extra-financial measures provided by ESG criteria can be helpful to monitor intangible assets and corresponding risk factors like for example reputation that could affect corporate performance. Further, company's market capitalization is built on its capacity to generate earnings from its physical and intangible assets. The value of companies has been shifting markedly away from the tangible ones that used to make up the greater part of their market value, to intangible assets such as intellectual capital. In many sectors, intangible assets are a key differentiator and are often a company's most valuable asset. ESG does not only have the potential to enhance brand and reputation, but also to protect companies from shareholder value erosion.

Sustainability risks can arise through many routes and may affect companies' operations or supply chains. Risks may be legal, financial, reputational or physical. One of the most obvious routes to value erosion for companies is via legal liability risk arising from their operations and products the target companies of the asset managers have. Developing a good reputation is already costly and time-consuming, and therefore once achieved a damage is even worse, which can happen for example when investors are disappointed not only in relation to financial returns but also when ESG fails. The long-term damage to a company's reputation in cases of legal liability may be unforeseeable. It is about reputational risk management, as corporate reputations, once damaged, is expensive and even difficult or sometimes impossible to rebuild.

²³⁰ Harvey M., Lusch R. (1997)

6.4. Exit Improvements

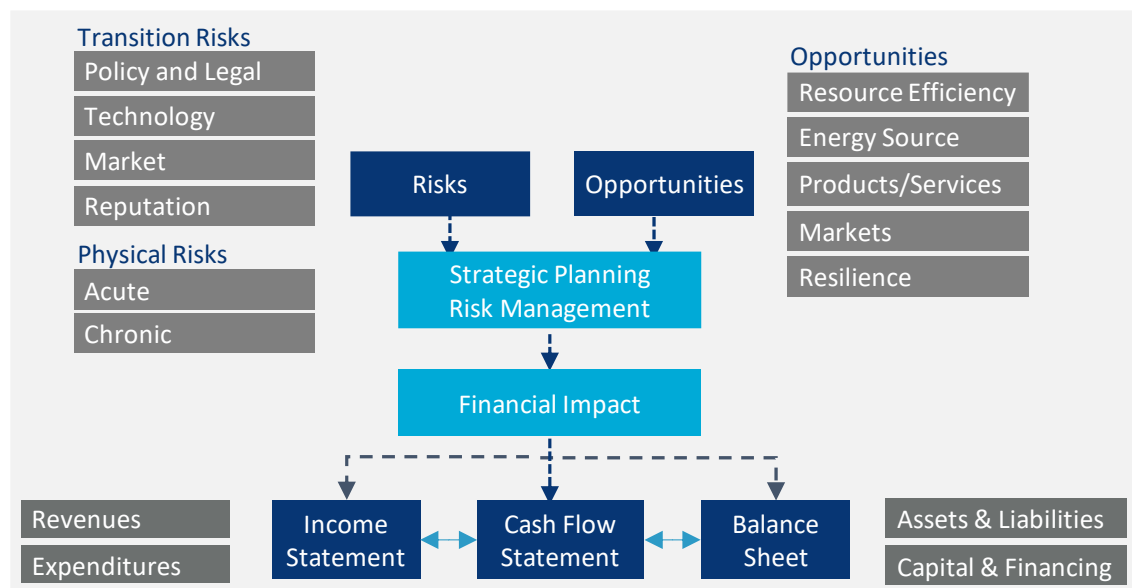
Considering that the PE industry was growing so much in recent years and made it to an accelerator of value creation, it not only exposed it more to the public eyes but also to acquirers of any kind, be it the competitors of their portfolio companies or potential stockholders. This means that the investments of the alternative industry cannot be disconnected from the ESG trend nor the asset managers themselves. The expectations have grown, and stakeholders and potential new owners have higher expectations than ever before. PE and other alternative asset managers should be aware of it, and consequently more than half of the researched asset managers integrate ESG in the investment process. They analyze the weaknesses and estimate the costs, although they might only be roughly evaluated, enhancing the standards has an impact on the future cash flow. Subject to their findings, additional audits and deeper DD might be required or even a special clause in the sales and purchase agreement like an earn-out might be introduced whereupon the seller will receive a certain amount of the purchase price only when a particular performance has been met or a risk has not been materialized. If findings are serious, they also could either try to lower the firm price or could abstain from investing. But in case of good compliance, nowadays a price premium is paid more often. On the other hand, it is argued that upgraded ESG performance during the holding period would increase future proceeds of sale. And considering the IPO is one of the likely exit scenarios, ESG compliance even becomes more important, as sustainable and responsible standards are increasingly demanded by listed companies.

6.5. ESG Reporting

However, while these invisible assets are significant drivers for stakeholder value, accounting rules, such as return on assets or equity, do not generally allow them to be recognized on the balance sheet unless they can be reliably measured. Amongst others, greenhouse gas emissions, energy efficiency, natural resources management, appropriate working conditions, health and safety, equality, diversity, and inclusion, product quality, corporate values and business ethics, control processes, and the adherence to laws and regulations need to be quantified. All of them either imply a cost factor or are a source of revenue. But, so far only first attempts have been made to really measure the impact, but some approaches do exist.

Amongst others, there are frameworks like the UN PRI, the Global Reporting Initiative²³¹, a non-governmental organization, that helps companies identify, gather and report in relation to ESG, the Integrated Reporting²³² that aims to improve the quality of ESG Data, and the Sustainability Accounting Standards Board²³³ that targets the integration of ESG into the accounting of public companies according to an industry classification system or the Global Real Estate Reporting Benchmark that covers all real assets.²³⁴ In addition, guidelines exist like the Task Force on Climate Related Disclosures, INREV, the European association for Investors in Non-listed Real Estate Vehicles²³⁵. Finally, best practice approaches are available like the Impact Reporting and Investment Standards and the Global Impact Investing Rating²³⁶, the Professional Records and Information Services Management²³⁷, Vigeo Eiris that helps to implement and to report ESG efforts²³⁸, or the Task Force on Climate-Related Financial Disclosures²³⁹, which has developed a risks and opportunities framework.

Figure 26: TCFD Framework²⁴⁰



²³¹ <https://www.globalreporting.org/Pages/default.aspx>

²³² <http://integratedreporting.org/news/financial-advisor-improving-the-quality-of-esg-data/>

²³³ <https://www.sasb.org>

²³⁴ <https://gresb.com>

²³⁵ <https://www.inrev.org>

²³⁶ <https://iris.thegiin.org/metrics>

²³⁷ <https://prismintl.org>

²³⁸ <http://vigeo-eiris.com/solutions-for-investors/integrating-esg-into-financial-operations/>

²³⁹ <https://www.fsb-tcf.org>

²⁴⁰ <https://www.fsb-tcf.org/publications/final-recommendations-report/>

But all these frameworks and guidelines use diverse criteria and measurements, and just the sheer number of frameworks and guidelines does not make it easy to choose one, and the adoption of one is still the exemption, also considering that portfolio companies and the asset managers should use the same methods. However, structured measurement and monitoring of all ESG issues should be implemented that can affect the companies, regardless of the level of risk with regard to the investment. Assessment and expectations for specific improvements have to be set up, for example, technological and environmental risks, notably when financing innovative industries, risks associated with delays in structuring human capital management in high-growth companies, deficient corporate governance within the regulatory framework that could lead to failings and eventually interfere the terms of transactions, or poor labor relations.

Figure 27: ESG Reporting Interaction²⁴¹

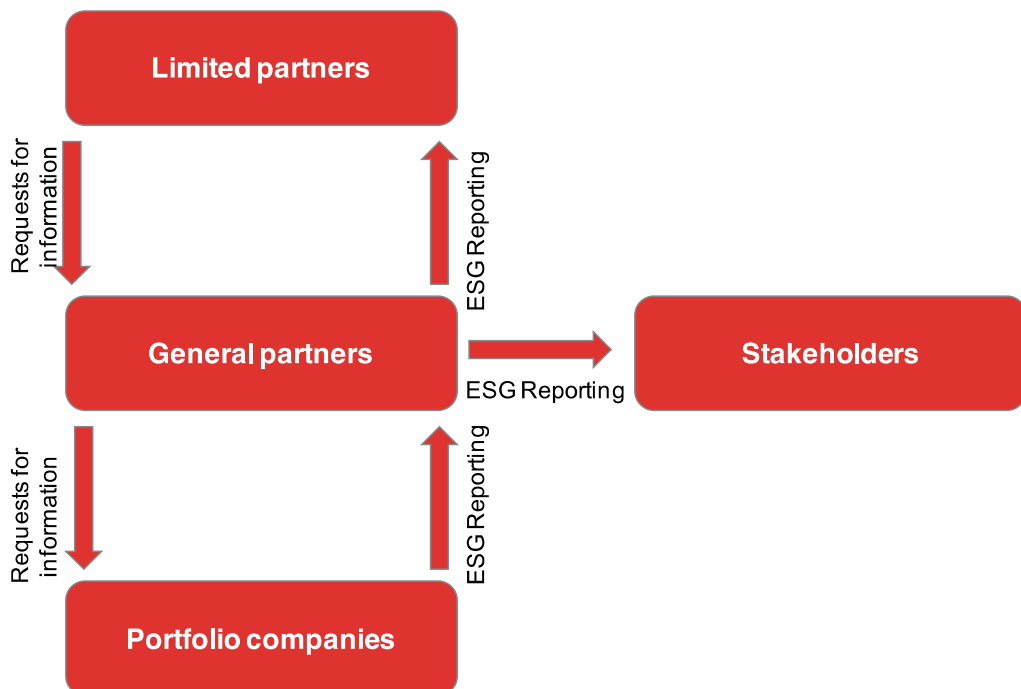


²⁴¹ <https://www.fidelityinstitutional.com/en/the-ceos-sustainability-dilemma-4d0f01/>

Measurement and monitoring will allow managers to take advantage of related opportunities, such as the identification of new issues and future risk factors, closer ties with the company, and dialogue with target companies that is not based on financial performance alone. And high ESG disclosure quality can even lower cost of equity and cost of debt financing, amongst others due to lower litigation and reputational risks²⁴², and on top showing that a company is compliant even attracts more potential investors²⁴³. High ESG disclosure quality also has a positive effect in relation to the employees, the customers, the suppliers, the environment, and the society as such²⁴⁴.

But the reporting concerns many parties that are involved. The investors in alternative assets, the LPs, more and more request information that shall regularly be provided to them. The manager, the general partner, is requesting information from the portfolio companies that shall also be shared with them frequently. And last but not least, all such information shall be provided to other stakeholders, too.

Figure 28: Alternative Assets Reporting System²⁴⁵



²⁴² Rezec M. (2016)

²⁴³ Heinckel R., Kraus A., Zechner J. (2001)

²⁴⁴ Girerd-Potin I., Jimenez-Garces S., Louvet P. (2014)

²⁴⁵ <https://www.bsr.org/en/our-insights/report-view/reporting-on-environmental-social-and-governance-considerations-in-the-priv>

So far, no clear industry wide definition of ESG and how it shall be implemented does exist. Even if more and more asset managers adhere to ESG, binding frameworks, initiatives or guidelines, and compulsory standards are not available, and it is not foreseen yet that they will be in the near future. Although, general guidelines by both regulators, industry organizations and stakeholders are available, they are not yet bound by any legislation, rules or regulations for all asset managers. But as this might come, it would be worthwhile anticipating such provisions. A proactive measure is just less costly and burdensome than forced compliance. Consequently, they need to create their own approach. PE and other alternative funds and their GPs are located around the world. An agreement would require the involvement of too many parties and, in particular, governments. With the European Green Deal, a first step has been made for regulatory obligations, although so far it does not cover the entire industry. An approach that addresses the entire industry irrespective of the size or the location of the asset managers would be desirable but is still unlikely. Different laws and regulations in various regions can even lead to a rag rug nobody might look through. It actually seems more likely that investors and society will drive the change.

However, the variety of reporting standards and inconsistency how asset managers measure and report their efforts is not only providing mixed results²⁴⁶. The same counts for how comparable companies, peer groups, are assessed, as no clear benchmarking has yet been defined. Imputation methods used cause confusion when data gaps need to be filled. ESG data not only has to be accurate, it needs to be comparable and consistent. However, it even took a while until generally accepted accounting principles were agreed, but the industry needs to assess the issue.

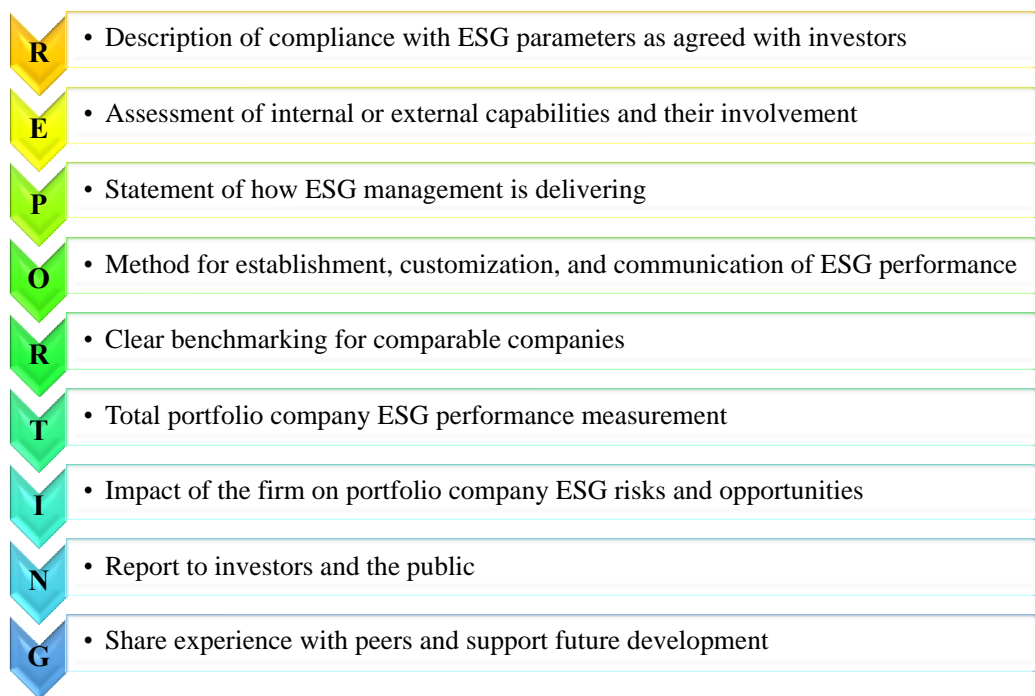
Although firm reporting in relation to ESG metrics is so far inconsistent, like the interpretation of any such data, integrated reporting for example into the quarterly or annual reports of asset managers can even provide greater impact and results than any stand-alone ESG report and provide a higher degree of value-relevance²⁴⁷, as it improves and links the causation of financial and non-financial information that is especially of interest for investors, and in addition it fosters their understanding.

²⁴⁶ Sakis K., Serafeim G. (2019)

²⁴⁷ Mervelskemper L., Streit. (2017)

Even if one would consider that ESG is not heterogenous due to differences in cultural perception, company size, asset class or various stakeholder views, a common standard for ESG reporting in the alternative sector is desirable, and different approaches could be overcome. Other industries have provided evidence that it is possible, but the alternative one is lagging behind sustainability reporting in other sectors. The UN PRI were a very good start and even have developed over time, same as the general understanding of ESG. A core set of KPIs has to be developed to track and collect data that is applicable, e.g. net employment, investment in research and development, and contribution to taxes, as well as sector based KPIs for high-risk sectors such as environmental data. Such reporting could be done in conjunction with the annual or quarterly reporting, and such reporting could amongst others include the following items:

Chart 122: How to Set Up a ESG Reporting Approach



The PE industry should share their efforts proactively with all its stakeholders, including investors, labor unions, regulators, and civil society. Maximizing value from reporting requires going beyond minimal regulatory requirements. Sharing information, by disclosing which matters are important, and by explaining the organization’s strategic objectives and its performance in delivering against these objectives, enables value to be considered in valuation models. As PE and other alternative asset managers more and more are aware of the importance of ESG, they have to consider telling what they do.

Moreover, the familiar principle of only being able to manage what you measure means that realizing opportunities for value creation needs to include performance measurement and reporting, at least internally, but with the option to realize full value through external disclosure. This might mainly apply to investors into alternative assets but going forward the public cannot be neglected any longer, too. Transparency, what investors and also the public are seeking for, can for sure be considered as part of ESG and good corporate governance, in particular. But, in order to reach a consensus to be included formally as a part of the reporting, it would require a top-down approach in collaboration with the asset managers. Industry organizations like the American Investment Council and Invest Europe and maybe the UN PRI should advocate for a binding ESG framework for the entire industry to apply best practices including its reporting. A legislative agreement might however not be possible. Too many countries around the world would need to be covered, and that the asset managers would be part of the procedure is barely likely.

6.6. Key Role of the UN PRI

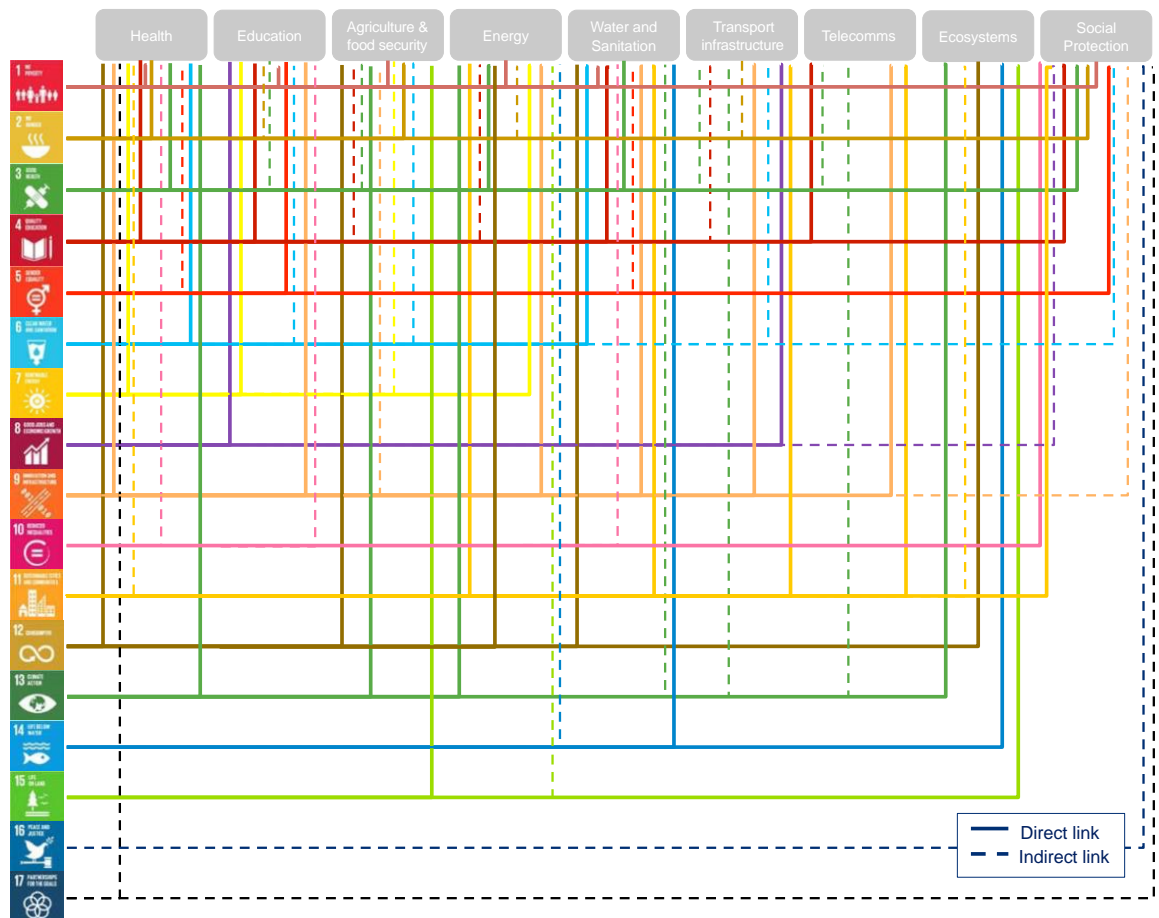
A key role in transforming the alternative industry into an even more ESG compliant sector can for sure be played by the UN PRI of which PE and other managers should be aware of. Signatories benefit of it in several ways. To begin with, the companies gain competences to improve their understanding of issues, risks, and opportunities. They have also access to international best practices when it comes to ESG policies, questionnaires or any other kind of data, which reduces research and cost that would be associated with an implementation. In addition, signatories become a member of an international investors' network that enables them to share approaches, problems, and solutions, and in a dialogue together with the UN PRI the asset managers can contribute to future guidelines and policies, which can be set up. And last but not least, it should not be overlooked that signing the UN PRI comes with reputational benefit, and the investment firms can bring their engagement to market. However, the organization might have a closer look what exactly its signatories do or not do in order to avoid greenwashing with its label. It seems that the UN PRI is taking action, as it has put 180 signatories on notice after an audit found out that minimum standards are not respected.²⁴⁸ Those firms were given two years to improve and to adhere to the standards.

²⁴⁸ <https://www.ft.com/content/ad38f37f-bd9c-34f1-848d-e5773be45b80>

As the loss of the signatory status would certainly be seen as a reputational damage, 88 companies met the requirements already, and 42 are on track for 2020. But, 50 firms currently run the risk of being delisted. Even though ESG is difficult to define, because the term is too subjective and embedded in normative and potentially cultural dimensions, the UN PRI could be more than a means to obtain legitimacy and good reputation if they would act as an agent of change.

ESG is not only a stand-alone process as such. In order to provide its full potential, it must be linked and integrated in all decision-making, the investment and holding process, in particular, and it must then be evaluated, measured, and reported. The SDG can play an important role in many sectors the alternative industry is investing into, and on top they provide attractive opportunities, which are available in all asset classes.

Figure 29: The SDGs and Investment Opportunities²⁴⁹



²⁴⁹ <https://www.unpri.org/sdgs/the-sdg-investment-case/303.article>

7. Conclusion

This thesis presents some insight to a subject that has not yet been researched in detail. Analyzing 117 PE and other alternative asset managers and what they have accomplished so far in relation to ESG, evidence through a quantitative and a qualitative research was found for what the industry really does. Companies from Australia and Europe do better than the ones from China and North America. Bigger firms are more advanced than smaller ones. The Infra asset class is most ESG affine, followed by PD, RE, VC, and PE. Asset managers that invest in more than just a single asset class are better placed. In summary, an attitude towards ESG across the industry was found, and that more and more alternative asset managers implement ESG practices and further enhance their approaches, which is the business case that it is not only desired but also works. Even if one would not primarily apply the fulfillment of all stakeholder needs and would still assume just shareholder value maximization as overriding aim of the industry, the facts are self-explanatory. In particular, the larger firms, the industry leaders, are engaged in advanced ESG activities. As the AUM increases, ESG almost comes as a matter of course. And not only considering ESG but also to truly implement in all investment stages can be become a real mainstream, as it fosters innovation, reduces risk, and provides higher reputation.

The recent pandemic of Covid-19 has hit the alternative asset industry, too. It is a developing situation, and the assessment of this situation for the alternative industry will need continued attention and will evolve over time. For the time being, it is considered to be a non-adjusting post statement of assets, liabilities and partners' capital event. Undoubtedly, this can have implications for the underlying portfolio of private equity and other alternative funds. The potentially adverse economic impact depends on the locations in which the funds invest and operate. Depending on location, industry sector and other factors, the operations and investment strategies may see a range of impacts, which, given the degree of uncertainty, are not possible to quantify at this time. Funds are actively analyzing their entire portfolio to understand risks and take measures to manage them. However, the number of leveraged PE deals already slumped drastically. As private equity and other alternative funds leverage their investments via bank or private debt, all existing financing clauses are being reviewed together with external advisors.

All covenant compliance set ups are reviewed, headroom is assessed, and they are stress tested. Financings currently ongoing are being pushed forward as quickly as possible. Cash situations and liquidity requirements across the portfolio are analyzed, as it is to be assessed for how much longer portfolio investments can stand the current environment. Therefore, asset managers increasingly use their uninvested funds to strengthen their portfolio companies. In addition, PE and other alternative funds still need to put their money at work and invest what was committed to them by their investors. Therefore, the structure and terms of current projects under offer are reviewed in detail in light of the current situation. It has also to be assessed if enough 'dry-powder' is available to acquire assets at opportune moments. All the impact of the health crisis on the alternative industry is discussed with a lot of stakeholders. Investors want to be and have to be informed and kept updated. In this regard, politicians mainly in the USA but also in Europe are calling for the industry to be protected from environmental regulations in the downturn. However, several asset managers have told to their investors' that they do not want to turn back time. Climate protection and ESG in general are nowadays seen as a competitive advantage. The Covid-19 pandemic will cause industries and asset managers to truly integrate ESG into their business model in order to create long-term value²⁵⁰, and investors will keep pushing. Even investors from Asia now seem to show more interest. The fact that ESG stock and bond markets were more resilient in the last months of market turmoil²⁵¹ will increase the likelihood of growing sustainable and responsible investing. The fact that Covid-19 will for sure have an impact on public health and safety spending as well as company's reaction on it creates further opportunities. Covid-19 might even legitimize ESG concerns, as investors want to see companies being prepared for the worst-case scenario by means of increased risks analysis.

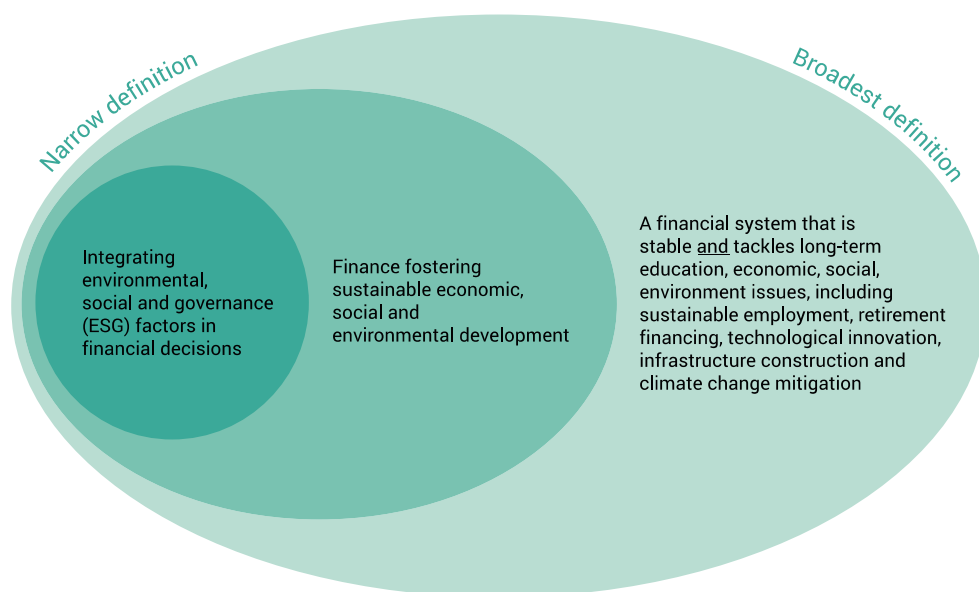
It was confirmed that how serious the alternative industry takes ESG, what it has done so far. Results from the analysis show that the topic is already well received. One can argue that the asset managers are already advanced with the implementation, especially bigger firms from Europe that invest in several asset classes.

²⁵⁰ <https://www.bloomberg.com/amp/news/articles/2020-04-08/covid-19-may-change-sustainability-as-we-know-it-green-insight>

²⁵¹ <https://www.invesco.com/content/dam/invesco/emea/en/pdf/esg-objectives-during-corona-apr-2020.pdf>

However, one can also bring forward that the industry still has a long way to go, as ESG is not yet integrated as a matter of course. Investment processes, the full integration, the active support during the holding period and finally measurement and reporting of ESG efforts can still be improved. But it is of course not only about the alternative industry. It is questionable if everything can only be achieved by itself. Although a legal and / or regulatory approach might not be the solution and impossible to cover all asset managers around the world, PE and other managers need external help in order to succeed. Advisors that work with different sectors have even more insight, and industry organizations like Invest Europe, the American Investment Council, and most of all the UN PRI have an overview what is required, what and how it is achievable, they oversee many actors, and finally they act as advocate but can serve as agent not only for the industry as such but also for a comprehensive ESG approach. It is desired to agree on ESG as an industry rather than a loner is doing it by its own. A more specific definition of what ESG is, common agreed KPIs, industry benchmarks, as well as an arranged measurement and reporting framework or guidelines are desirable. However, it might not end with integrating ESG. The aim is noble. The financial industry including PE and other alternative asset managers can even do more. Some progress has been made in the last years, but the path to a fully sustainable and responsible industry is long.

Figure 30: Three Definitions of Sustainable Finance for the Future²⁵²



²⁵² https://ec.europa.eu/info/sites/info/files/170713-sustainable-finance-report_en.pdf

It can therefore be believed that the thesis at hand has shown what PE and other alternative asset managers have accomplished so far in relation to ESG, and based on the research conducted, the main conclusion is that looking ahead, it seems that the PE and other alternative asset managers world will never slide back to the stage they were in before. The rules of the game have shifted and are constantly changing, and the values of sustainability and responsibility support and confirm these new rules. Asset managers will therefore further enhance their ESG approach.

If they would stand still, they would get left behind. Another new motivation for the industry is also the alpha generation, the millennials, and the Generation Z who are becoming an increasingly important driver of the ESG agenda. The new generations tend to have higher demands and expectations for sustainable and responsible products and services. They are key stakeholders, as either potential employees or consumers of their target companies or investors. They have higher expectations and demands for sustainable and responsible products and services than their parents. ESG in PE and other alternative asset classes is not going to go away. It is here to stay, and it will increase and enhance in the future.

In an interview already given to the Wall Street Journal on March 26, 2012, David Rubenstein, co-founder of The Carlyle Group as one of the biggest alternative asset managers of the world and perceived by many as the uncrowned secretary of state of PE said²⁵³: *“We should act like a public industry. The funds are private, but they are so large that we need to deal with the public, with labor unions and with environmental groups, as if they [private equity funds] are public companies. [...] Sustainability equals more cash flow. And if you are willing to put in the time to improve the sustainability principles of a company, you can in fact make more money... .”*

* * *

²⁵³ <https://www.wsj.com/articles/SB10001424052702304636404577299652553219204>

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