

Unlocking the potential of ESG

Responsible Investing Report 2018



Contents

Our approach

- **3** Active is: Unlocking the potential of ESG
- 4 Active is: Creating value through ESG investing
- **6** ESG investment shifts into a higher gear
- 7 ESG research: Understanding extra-financial risks
- 8 Developing a global collaborative culture

Active stewardship

- **10** Face to face
- **12** Proxy voting

Unlocking the potential

- **14** Integrating ESG
- **16** Socially responsible investing
- 18 Confronting the carbon challenge case study

Client voices

20 Real results: ESG in action

Insights

- 24 Room to grow
- **26** The sovereign bond factor
- 28 Narrowing the inequality gap
- 30 The impact of "green"

Our voices in the industry

32 Facing down the opportunities and challenges

Active is: Unlocking the potential of ESG

There are nearly 2,000 signatories to the UN Principles for Responsible Investment (UN PRI),¹ representing almost USD 90 trillion in assets under management. Such collective muscle would suggest that consideration of environmental, social and governance (ESG) factors has become a primary concern for asset managers and asset owners in their investment decisions.

Yet, the global growth of interest in ESG since AllianzGI signed up to the UN PRI in 2007 has coincided with an increase in investor expectations and product categories, which seek to address different philosophical positions and client requirements. Consequently, we believe it is important to be clear about what we offer and what we mean when labelling our offering.

As an active investor, research is core to our ability to generate returns. We have been able to demonstrate that ESG research can provide an important signal for future performance. Thus, we have an active programme of engagement and stewardship and our proprietary ESG research is available to all investors across AllianzGI. As a baseline, we can say that all our investments are ESG informed.

While many firms talk about integrating ESG, we have taken a very rigorous approach in our "Integrated ESG" labelling. Each portfolio team is responsible for questioning potential holdings with low ESG ratings and contributing to the firm's "digital debate" about companies' ESG risks. This internal crowdsourcing ensures that experienced portfolio managers and industry analysts are contributing views on ESG risk, which we believe is

superior to relying entirely on external ESG ratings and buying in to third party methodologies and judgements. When a portfolio team still sees a compelling opportunity to invest in a company, despite the acknowledged ESG risk, they must document their risk/return thinking in our collaboration system. Because our portfolio managers understand ESG risk and also have the ability to own risky ESG companies, we're in a unique position to engage with the companies that need it most, as we seek to see that risk reduced through change. In this way, we are committed to, and in the process of, embedding ESG as a tangible factor across all of our strategies regardless of asset class. Already, Integrated ESG applies to EUR 116 billion of the assets we manage.

One of the strengths of Integrated ESG is that it builds an additional factor into existing investment processes: enhancing rather than changing the process. Yet we recognise that for a number of clients, ESG is more than a risk-based investment factor.

Through our experience in Socially Responsible Investing (SRI), we are well equipped to provide investment solutions that address clients' extra financial needs – whether that is through the application of negative screening, or increasingly through positive screening and creating an impact. In addition to EUR 22 billion in SRI strategies, AllianzGI is managing around EUR 6 billion of impact investments. We are committed to meeting growing client demand in this area through insights and innovation.

The purpose of this report is to



provide an update on: areas of ESG research we are focused on; our engagement with investee companies and how we are fulfilling our stewardship role; how we are integrating ESG across our investment strategies; and the ways we are innovating to meet clients' evolving extra-financial demands.

Whether it is through integrating ESG into investment strategies, offering best-in-class SRI strategies or developing strategies that aim to fulfil an explicit extra-financial purpose to generate an intentional impact, we have built a culture of collaboration and active interaction among our investors around the globe. In so doing, and through an ongoing focus on this subject, we hope to unlock the potential of ESG and serve a spectrum of client demands.

We hope you will join us on this journey.

Andreas Utermann

Chief Executive Officer and Global Chief Investment Officer

¹Source: UN PRI Annual Report 2018, The PRI in numbers

Active is: Creating value through ESG investing

Environmental, social and governance (ESG) factors are important investment performance drivers, from both a return and risk perspective

Our credentials

Assets under management: EUR 524 billion

ESG is in our DNA **ESG** informed **Impact** Investing for impact EUR 380 bn EUR 6 bn We are committed to Investments targeting integrating ESG factors into environmental and social all investment decisions and outcomes alongside across all asset classes. financial returns. ESG factors are crucial Best-in-class approach investment performance Assessment of ESG drivers, from both a return SRI practices and values in and risk perspective. **EUR** the analysis process and 22 bn in portfolio construction. All investment professionals have access to ESG analysis via our proprietary digital Active ESG risk management research platform. Financially material ESG factors integrated into portfolio strategies We pursue an active stewardship without constraint. Portfolio managers **Integrated ESG** approach to improve business practices justify investment decisions on ESG and company performance. EUR 116 bn risk/return.

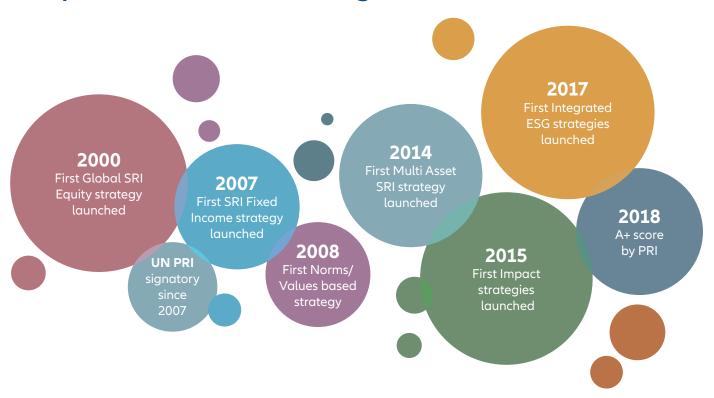


An ESG pioneer since 2000

PRI top score A+ on ESG strategy and governance Proprietary global ESG research Allianz SE sustainability leader (DJSI)

Data as at 30 June 2018. Source: Allianz Global Investors. Any differences in totals are due to rounding. Impact comprises different strategies targeting climate transition, environmental projects and renewable energy. ESG = Environment, Social, Governance; SRI = Socially Responsible Investing; PRI = Principles for Responsible Investing; DJSI = Dow Jones Sustainability Index

Stepping forward – AllianzGI is a pioneer in ESG investing



Our ESG strategy acknowledged by PRI

AllianzGI has received an A+ for its overarching approach to ESG Strategy and Governance for the second year running. This category encompasses AllianzGI's ESG policies, objectives and memberships of various organisations, and considers how the firm promotes ESG efforts internally and externally. We also received an A+ for the Infrastructure Equity module, which we reported on for the first time this year.

The annual assessment report from the PRI Association ("Principles for Responsible Investment") looks at how signatories are progressing with incorporating ESG factors into investment decisions, and aims to provide feedback to signatories to support the ongoing development of their ESG credentials.

The report presents a comprehensive overview of the assessed modules AllianzGI reported on and compares the respective AllianzGI performance to the peer group. Each module score ranges from "A+" (highest score) to "E" (lowest score) and is calculated from a respective set of indicators grouped together in module-specific sections. The scores for 2018 refer to the reporting period January – December 2017, while 2017 scores refer to reporting period January – December 2016.

Module name	AllianzGI score 2018	
Strategy & Governance	A+	Α
Listed Equity – Incorporation	Α	В
Listed Equity – Active Ownership	Α	В
Fixed Income – SSA	Α	В
Fixed Income – Corporate Financial	Α	В
Fixed Income – Corporate Non-Financial	Α	В
Fixed Income – Securitised	Α	С
Infrastructure Equity	A+	Α



ESG investment shifts into a higher gear

The rate at which ESG is becoming a mainstream concern has accelerated in 2018. Alongside the growth of ESG-related assets, the interest in and passion for the topic has become ever more evident in client interactions and events around the world.

Investors recognise the relevance of ESG factors to financial performance, while responsibility for integrating them is shifting from niche concern to being on every CIO's agenda. Companies that recognise and manage this are increasingly attractive to investors, while those that ignore it can be perceived as riskier. The paradigm is shifting.

Investor education, clear labelling and clarity around investment philosophies are needed if capital is to be well-allocated and investor needs met.

To this end, AllianzGI is seeking to bring transparency and leadership by positioning products clearly: distinguishing between those where portfolios are unconstrained but ESG risks are evaluated, avoided or

managed through engagement by our portfolio managers; and those where portfolios are explicitly constrained from owning lower quality ESG securities, or are making investments which direct capital to social challenges.

Our experience across the field of ESG reinforces our conviction that these factors can be important performance drivers when adopting an active approach to asset management. Moreover, feedback from our clients shows that they value this expertise and the transparency as we help them achieve their financial – and extra-financial – goals.

Steffen Hörter

Global Head of ESG

ESG research: Understanding extra-financial risks

Eugenia Unanyants-Jackson

Global Head of ESG Research

A fundamental role of the ESG research team is to share its expertise in the consideration of ESG factors in order to identify risks and opportunities that have not been fully priced by the markets.

The ESG research team offers specialist expertise and support to AllianzGI's portfolio managers across the entire spectrum of ESG-related requirements, including:

- ESG research, both company specific and thematic
- Proprietary SRI/ESG ratings model for dedicated strategies
- Research to support proxy voting as well as company and policy-level engagement

The ESG research team is structured primarily by sector; however, each analyst also follows a number of major global themes and has regional coverage from a corporate governance and proxy voting perspective. The ESG analysts have specialist knowledge on the ESG issues that impact businesses in their sector. This approach ensures we are not overly reliant on external research and can generate independent and differentiated insights into ESG topics ahead of the market.

The role of company-specific ESG research

ESG analysts undertake in-depth research to identify ESG tail risks on existing and potential investments, assess materiality of ESG risks flagged by third-party providers and draw AllianzGI investors' attention to issues and trends that can become material if unaddressed. As a starting point, MSCI research and numerical ratings are made available to all investors through our proprietary research database and collaboration system. The use of third-party ratings and underlying research helps us to achieve necessary coverage, while also indicating to our investors what the market is likely to be thinking about companies in their portfolios.

The added value for our clients comes from proprietary insights obtained through internal knowledge of the company's business, our

in-house ESG expertise, and collaboration and discussion around ESG risks and factors. Analysts and portfolio managers are at the core of this process,

undertaking initial review of third-party research and formally requesting further analysis and input from the ESG research team. This typically occurs when they disagree with the MSCI assessment of a specific ESG risk of an investee company or when they are concerned by issues highlighted in the MSCI research and want additional insights.

All output from the ESG research team, including comments from sector analysts and portfolio managers, is available on our collaboration platform alongside all other information and research on the company. Upon completing ESG research on a company, the ESG analysts will post their views, highlight identified ESG tail risks or material opportunities, and make a decision with regard to the company's intrinsic ESG rating. From September 2016 to June 2018, 73% of the intrinsic ESG reviews led to rating upgrades and 18% to downgrades. More than half of the upgrades were related to social factors, while three in five of the downgrades occurred in governance ratings.

Information on ESG tail risks and material opportunities can be used by analysts to inform their models and forecasts, influencing their financial votes, and by portfolio managers as a consideration in title selection or portfolio construction. The objective of this approach is to equip sector analysts and portfolio managers with ESG knowledge and insights leading to better investment decisions. Importantly, where sector analysts or portfolio managers disagree with the ESG analyst's conclusions and/or ESG rating of the company, they should substantiate and share their views with the investment platform. This encourages further discussion, helping us to leverage AllianzGI's unique collaboration system and culture to generate collective proprietary insights.



Developing a global collaborative culture

Cross-border co-operation is the essential ingredient in making ESG work



Steve BerexaGlobal Chief Investment Officer for Equities

As active investment managers, how can we harness technology and better organise ourselves to face competitive challenges and disruption? And how should we credibly integrate ESG across our whole business? These were the leading questions for us as we sought to extend a collaborative approach to ESG across our truly global investment platform.

We began our journey in 2012 to see how far we could take the new technology and try to transcend email and conference calls as a means of investment collaboration. Fast forward five years and 50,000 lines of custom code: after integrating most of our investment data into this system, we have succeeded in bringing together our investors with social network technology across a dozen global locations.

My home is in the US, but I feel very close to my colleagues in Germany, Japan, France and elsewhere – a very satisfying achievement.

How did we make it happen?

- We were very lucky to already have an established collaborative culture, meaning that adoption was rapid and enthusiastic.
- 2. We managed to organise the written collaboration itself with tagging. This means

- that the contributions we've received have resulted in a significant database of posts building ever-richer data searches and views into our collective institutional knowledge.
- 3. Everyone sees the value: analysts collaborate across the world to triangulate their views on supply chains and industries. Portfolio managers, who contribute more than half the posts, explain their new ideas and trades.
- 4. We've learned throughout the process about rapid software development and training. Additionally, we are actively encouraging people to adopt new approaches with questions such as "How's traffic this week?" "Are people using the new functionality rolled out last week?" "Who doesn't appear to be participating and why?"

Together with our proprietary market research capability Grassroots®, our global collaboration tool, has played a major role in many of our new initiatives aimed at active management and ESG integration.

How does it works in practice?

While a Chinese e-commerce firm would possibly never be owned by an SRI portfolio, it is important to understand how we would look at the stock from an Integrated ESG perspective.

We often begin by looking at external reference materials, in this case MSCI. We have a digital debate within our collaboration system, with the last word given to our own ESG analysts.

Integrated ESG example: Chinese e-commerce firm



Third-party/input consensus



Internal debate



Final decision by the ESG analysts



PMs explain their risk/reward decisions



Follow-on actions

MSCI: Governance is poor (with full analysis) Analyst: "It's too important to China to be a fraud"

PM A: "It's a possible geopolitical pawn in Sino-US tensions"

PM B: "They can't hurt the employees' options, we're OK"

PM C: "Facebook etc have poor minority protections too"

ESG Analyst:

Governance is actually very poor (with full analysis)

Analyst: "I continue to hold - there's > 50%upside for these reasons..."

PM A: "Selling out buying Tencent local shares instead"

PM B: "Selling half keeping under 1% to mitigate the risk"

PM C: "Keeping - still best global internet opportunity (with the risk)"

Analyst opinion changes after more price appreciation

Engagement with the company to remedy policies around governance

PMs might reopen the debate, given new information

PM C will be challenged in each ESG review to switch

But we allow each portfolio manager to make their own risk/reward judgement in the context of their benchmark, their mandate and their holistic consideration of the stock in question.

And, of course, it doesn't stop there. If some of us still hold stock, we'll engage with the company on that issue. Anyone is able to reopen the debate. The portfolio manager who chooses to own risky stocks will be periodically challenged to

purposes.

"We have succeeded in bringing together our investors with social network technology across a dozen global locations"

consider alternatives – just as we have regular reviews with them about all other types of risk. Finally, each and every interaction is captured digitally and made available for reporting

As is clear, it would be hard to carry out Integrated ESG without our global collaboration system. We're seeking to achieve a high level of transparency. All the ESGrelated activities shown in the prior example, for instance, ought to be reportable elements. As portfolio managers and analysts engage with companies and debate proxy votes, this is all captured within our system as well.

The burden of proof for Integrated ESG is high. We decided that we needed a process that leaves a very clear paper trail, and where clients should receive a quarterly inventory of ESG actions about their portfolios – research, debate, decisions, engagement – once a strategy formally qualifies as Integrated ESG.

This process formalises all our ongoing stewardship efforts and is self-reinforcing. From a cultural aspect, the portfolio managers can see each other's ESG-related activities within our social collaboration tool.

Face to face

Engagement activities help us to understand and mitigate the real risks of our holdings

All investment professionals at AllianzGI are committed to engaging with the boards and management of investee companies to help them improve performance and safeguard their long-term prospects.

Our 196 engagement activities across 11 industries and 19 markets – with executive and non-executive board members – enhance our understanding of a company, help us assess leadership and oversight, and build our confidence in the board and management.

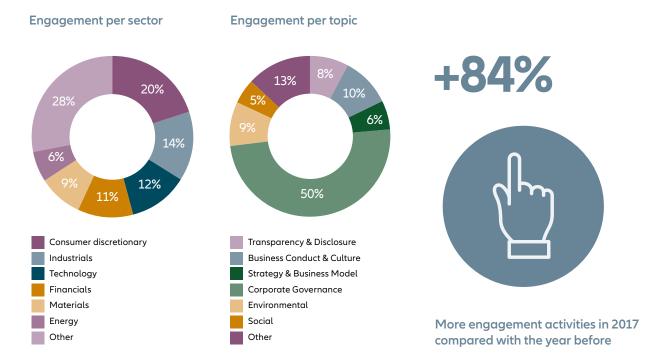
The most common engagement activities relate to an investee company's strategy, operational or financial performance, capital management, corporate governance and proxy voting issues, and their environmental and social impacts. Our investment views are influenced by the outcome of these activities and linked to the proxy-voting process, forming a consistent stewardship approach.

Stewardship activities

In addition to our focus on direct engagement with the boards and management of sizeable holdings, we lead a series of targeted, themed engagement projects that can take different formats. We also participate in collaborative engagement initiatives aimed at improving corporate practices and disclosure of information at an industry or market level.

Engagement activities

Consistent with our investment philosophy and approach, we routinely engage in dialogue with investee companies and proactively seek to present a viewpoint and look for change where necessary:



Our engagement in action

Mining sector and environmental issues

We engaged with a mining company on its management of climate change-related risks. It was encouraging to learn about their efforts to decarbonise operations with improvements in energy efficiency and investment in new technologies. If implemented, these will prepare the company to better mitigate the potential financial impacts of tightening carbon regulations.

We encouraged the company to continue embedding carbon considerations into strategic planning and will monitor its progress.

Reducing supply chain risks in Bangladesh's garment sector

In 2013, AllianzGI signed the first investor statement calling on retailers to collectively pledge to implement the core labour standards of the International Labour Organization and join either the "Accord on Fire and Building Safety" or the "Alliance for Bangladesh Worker Safety".

Increased supply chain transparency, with a common standard for auditing suppliers and sharing findings, has driven positive change. We believe Bangladesh can be a showcase for industry collaboration, particularly as regulations to combat modern slave labour are refined.

Public policy engagement

AllianzGI responded to the public consultation for the annual revision of the German Code of Corporate Governance.

Our comments and suggestions for further improvements to the code focused on protecting minority shareholder rights; the composition, role and oversight of supervisory boards; managing company compliance; and management board compensation.

Collaborative engagement efforts

Since October 2015, AllianzGI has been project lead on the Sustainable Stock Exchanges Initiative (SSE), which asks stock exchanges to produce voluntary guidance for issuers on reporting ESG information.

We co-signed a letter to 70 exchanges, encouraging them to create more transparent and efficient capital markets. This coincided with the launch of the SSE's Model Guidance on Reporting ESG Information, a voluntary tool for stock exchanges to guide

By the end of the campaign, we had successfully encouraged 30 exchanges to commit to producing ESG guidance. As of December 2017, 18 exchanges have publicly released their guidance, with a further 12 committed to doing so in the future.

IT sector and social issues

We engaged with a company's directors on human capital-related risks. An initial meeting confirmed that it prioritised intellectual capital management. Yet while its employee turnover was low, human capital management was among its key operational risks.

The company successfully moved from a hierarchical structure to an agile model, and is being recognised as a top employer. Sales incentives are now aligned with overall business goals. We are confident that the talent pipeline and employee retention and development are well managed. Moreover, we have encouraged the company to amplify public disclosure to help shareholders track their ability to attract, recruit, retain and motivate employees.

Industrials sector and governance issues

We engaged with a non-executive board member after voting against proposals addressing the investee company's audit committee composition and remuneration of certain board members.

The discussion was constructive, revealing concrete steps taken by the board to improve governance standards at the company, and company-specific circumstances that could justify certain departures from conventional practices.

Proxy voting

Making use of the right to vote at shareholder meetings is a key element in AllianzGI's approach to active stewardship

In 2017, AllianzGI voted at 7,961 shareholder meetings and on 83,488 proposals from both management and shareholder. This is up from 5,794 voted meetings covering 61,618 resolutions in 2016.

AllianzGI voted against both company and management in 2018 on a range of issues, including re-election of directors, executive pay and capital authorisations. In total, AllianzGI voted against management with at least one vote at 68% of shareholder meetings held in 2017, or 24% of individual proposals, underlining our commitment to voting against proposals that do not meet the expectations we have for investee companies. In 2017, AllianzGI voted against 12% of all resolutions or against at least one proposal in every second shareholder meeting.

"High levels of disparity should be a wake-up call for companies in those markets that are lagging"

Proposals that were related to board and director re-elections were by far the most common at 2017's shareholder meetings, accounting for 53% of all votes cast by AllianzGI. This was followed by routine or business-related matters (23%), executive compensation and other pay issues (11%) and capitalisation (9%).

Alongside these themes, we continued our drive to engage companies around the world on strategy, governance, risk management, environmental, social and other topics that are deemed material for our investments.

Eugenia Unanyants-Jackson, Global Head of ESG research at AllianzGI, explains: "These votes are cast based on the same criteria in each region and high levels of disparity should be a wake-up call for companies in those markets that are lagging, including the US and France, to start adapting to globally rising standards.

"Consistent with our investment philosophy and approach, we routinely engage in dialogue with investee companies and seek proactively to present a viewpoint, usher change where necessary and monitor the results of our engagement.

"We do not expect a radical shift in the areas of most serious scrutiny, however, we will once again step up our engagement with issuers where our analysts and portfolio managers discern a weak connection between a company's strategic objectives, business value drivers and business practices."

Regional variations

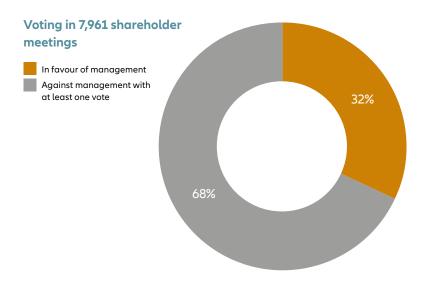
AllianzGI's voting patterns highlight significant regional differences in corporate governance standards around the world. In Japan, AllianzGI voted against 45% of all proposals, compared with 35% in the US, 33% in France, 28% in Hong Kong, 13% in Germany and just 6% in the UK. These figures reflect the different stages of development in governance standards in the US and Japan compared with European markets.

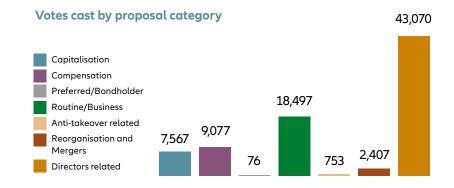
Eugenia Unanyants-Jackson explains: "One of the key reasons for our high level of votes against compensation proposals in the US was a weak alignment between pay and performance, with US companies continuing to show an insufficient link between long-term key performance indicators and executive incentive plans."

Director-related proposals is another area where we see a vast gap in votes against between regions. In the US and France, the percentage of votes against director-related proposals is more than 30% compared with 7% in the UK.

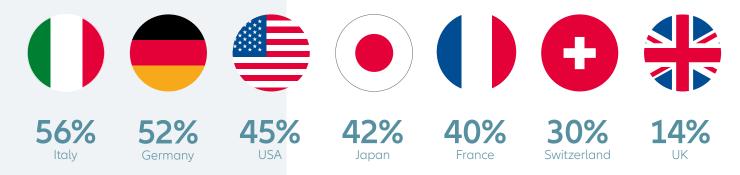
Proxy voting activities

At AllianzGI, we take our fiduciary obligation to be an active shareholder very seriously. We therefore exercise our voting rights:





Total percentage of AllianzGI votes against compensation-related proposals by country



Integrating ESG

Another risk dimension – better understood

AllianzGI is in the process of integrating ESG across all portfolios. So far, EUR 116 billion of assets qualify as integrated. The main objective of our ESG integration process is to analyse financially material ESG factors in our investments, and to build a forwardlooking ESG risk and opportunity assessment that is part of the broader investment case judgement. We focus on how ESG factors might affect the future performance of industry sectors and specific companies. We examine whether these factors arise from their governance approach and the way they are managed, the externalities of business activities, shifting consumer demand and societal trends, or wider market developments, including market regulations.

While we use corporate ESG ratings from selected third-party ESG research providers, we don't rely on them because they often draw heavily on corporate reports only. In our view, ESG issues take a discretionary expert view, which requires significant research. Usually, the issues surrounding ESG are nuanced and not simply black and white. This often sparks internal discussions that help us identify

"We add value with our own insight into a company's business, risks and value drivers"



stronger, more accurate signals of ESG risk and opportunity, capitalising on all our investors' knowledge of companies and industries. This internal review process is facilitated by our in-house, proprietary ESG research team, which contributes to the research dialogue with expert views along industry sectors and specific corporates.

Through the collaborative, global crowd-sourcing of views we also incorporate our insights that are gained by talking and engaging with corporates. Simply put, we aim to determine if a corporate understands which ESG factors are relevant to them and if and how they actively manage and invest in them. Reversely formulated, we think corporates are not attractive investments if we know that they manage the wrong ESG factors, ignore the ones that are relevant to them and do not have any plans for improving them. Through corporate engagement, we aim to steer corporates to a more successful,

forward-looking ESG management to achieve sustainable business performance and excellence.

All ESG research comments and conclusions are recorded on our digital research platform at both the corporate issuer and investment strategy level. We can demonstrate in detail our ESG views to clients through this approach.

We add value with our own insight into a company's business, risks and value drivers; our in-house ESG expertise; and the ongoing collaboration among portfolio managers around tangible ESG risks and factors. We aim to deliver better risk-adjusted returns overall through our ESG integration.

For the assets we manage, our ESG integration is part of our investment DNA. For clients that have specific sustainability objectives, such as targeting a specific sustainability footprint or impact, we have customised ESG solutions that aim to incorporate their preferences.

The next step in investment

Implementation case: integrated ESG in an unconstrained equity portfolio



Christian SchneiderSenior Portfolio Manager, Global Equities

Using ESG criteria to analyse companies' performance is nothing new. ESG data has traditionally been used with SRI strategies to filter undesirable stocks out of the investment process, covering metrics ranging from greenhouse gas emissions to board diversity.

At AllianzGI we have always gone beyond simple exclusion. Our dedicated ESG research team was established in 2000 to investigate and engage with companies. Over the years, this has produced results ranging from increased board diversity to the Sustainable Stock Exchanges Initiative. What's more, unlike passive managers, we can sell a company's stock if it refuses to improve.

It has become increasingly clear just how intertwined ESG criteria are with financial performance. A business's societal impact now shapes the choices made by its consumers, employees and regulators, which in turn can determine its bottom line. Even if ESG performance is not reflected in share prices today, it can point to longer-term tail risks and opportunities.

Integrated ESG (IESG) simply means combining the analysis of ESG criteria directly into the investment process. We do this by giving our analysts and portfolio managers the tools to reach their own verdict about ESG performance.

At a stock level, this means combining and enhancing MSCI's company reports with our own views to produce individual ratings across the categories E, S and G. However, these IESG ratings do not force a portfolio manager to sell a stock if the rating falls below a certain threshold. Instead, portfolio managers are free to invest in these longer term tail risks, provided they can clearly explain their risk/reward rationale.

As the manager of the Global Equity Unconstrained strategy, I build portfolios on the basis of company fundamentals, with no regard to a benchmark's sector or market-cap composition. One of my main concerns, therefore, was that IESG would impinge on our team's investment philosophy. Yet looking at the long-term societal factors impacting a business is now a significant means to understanding its true nature.

Consequently, at an investment level, IESG simply formalises the hunt for quality, which has always been part of our search for high-growth companies at reasonable valuations. Furthermore, today we can document any stock-specific ESG concerns we have, alongside a complete history of our engagement with management and the overall investment case. This is a clear advantage for us as a firm, and is a process that continues through the long-term stewardship of all our holdings.

IESG represents a next step in the evolution of our offering. It gives us the tools to refine and better communicate a long-standing element of our investment analysis and, over time, will enable us to bolster our central ideals and deliver better value for our clients.





A unique approach to harnessing ESG analysis

Isabel ReussGlobal Head of SRI Research

AllianzGI manages EUR 22 billion in accordance with its Socially Responsible Investment (SRI) process. AllianzGI's SRI strategies use a rigorous investment process that considers both financial analysis and ESG analysis to build a strong, sustainable portfolio. We apply a best-in-class approach, i.e. we select and invest in companies that have a positive ESG performance relative to industry peers.

At the core of our approach is a proprietary SRI analysis and rating methodology that was first developed in 2002 and has been evolving ever since. Our analysis identifies best and worst practices, combining these considerations with the qualitative assessment of our in-house ESG analysts. We approach ESG analysis from a holistic point of view, taking into

consideration corporate governance, the environment, social development, business behaviour and human rights in our assessment. Just like other AllianzGI strategies, we practice active stewardship and proxy voting, using engagement as a dialogue to enact change and address sustainability opportunities and risks with issuers.

The flexibility of our proprietary methodology has allowed for changes in data providers, indicators, approaches and an evolution in the way that ESG risks are analysed over the past 16 years. This has enabled us to identify and incorporate emerging long-term trends. The underlying combination of more than one source of data, the coherence in the approach across asset classes and sectors and the consistency in the way data is harnessed is unique; this

is then enhanced by input from our inhouse ESG analysts.

How our model works

Quantitative ESG analysis is the first step to attaining our proprietary SRI rating. Our SRI ratings cover roughly 5,500 issuers globally across equities, corporate bonds, sovereigns, agency and supranational bonds. Our model identifies and weights ESG indicators for each sector, recognising that an ESG issue's relevance will differ from sector to sector. Our model allocates each issuer a rating in four domains: corporate governance, environment, social development and business behaviour. The weight of these four domains is sector-specific and combine to create our SRI rating.

On top of this, we analyse human rights as a fifth distinct domain, which is applied as an ex-ante filter. The SRI

Areas of analysis



Corporate governance

This domain is an analysis of the companies' governance structures, composition, quality and effectiveness of board and management, alignment with investor interests, protection of shareholder rights, transparency and appropriateness of remuneration systems, independence and quality of audit.



Environment

We assess the issuer's direct and indirect environmental impact and risks incurred. Our assessment methodology in this domain incorporates the Ten Principles of the UN Global Compact regarding the environment. We also examine the sector-specific environmental challenges a company faces. Finally, we

integrate the way in which an issuer addresses climate challenges.



Social development

This domain considers the issuer's direct social responsibility, including employee dialogue, workplace health and safety considerations and career management. General social policy is considered in the assessment of government states with a particular focus on topics such as the healthcare system, education, the role played by women in civil society and the extent of infrastructure that provides citizens with access to basic necessities.



Business behaviour

Here we consider the relationships between the issuer and other parties,

including clients, suppliers and local authorities etc, and the evaluation of the impact the products or services have on society, such as product safety and respect of market regulations. Our analysis in this domain addresses the UN Global Compact Principle related to corruption based upon the UN Convention Against Corruption.



Human rights

This is an exclusion filter for all AllianzGI SRI strategies. Our analysis in this area is based on the issuer's respect of human rights in its business conduct, including integration of the Universal Declaration of Human Rights principles, respect of major International Labour Organization conventions and signature of the UN Global Compact.

rating and the human rights filter determine whether to invest in the issuer. This selection process is strengthened by a "worst practice" exclusion rule. The aim of this rule is to ensure that an issuer with a rating below a minimum requirement in any of the four domains does not qualify, despite a satisfactory weighted average SRI rating across all four domains.

In parallel with this quantitative rating, our in-house ESG analysts perform an internal qualitative analysis for the portfolio holdings on SRI-relevant topics. This qualitative analysis may also lead to an SRI rating being modified upwards or downwards, which is done exclusively by the ESG analysts.

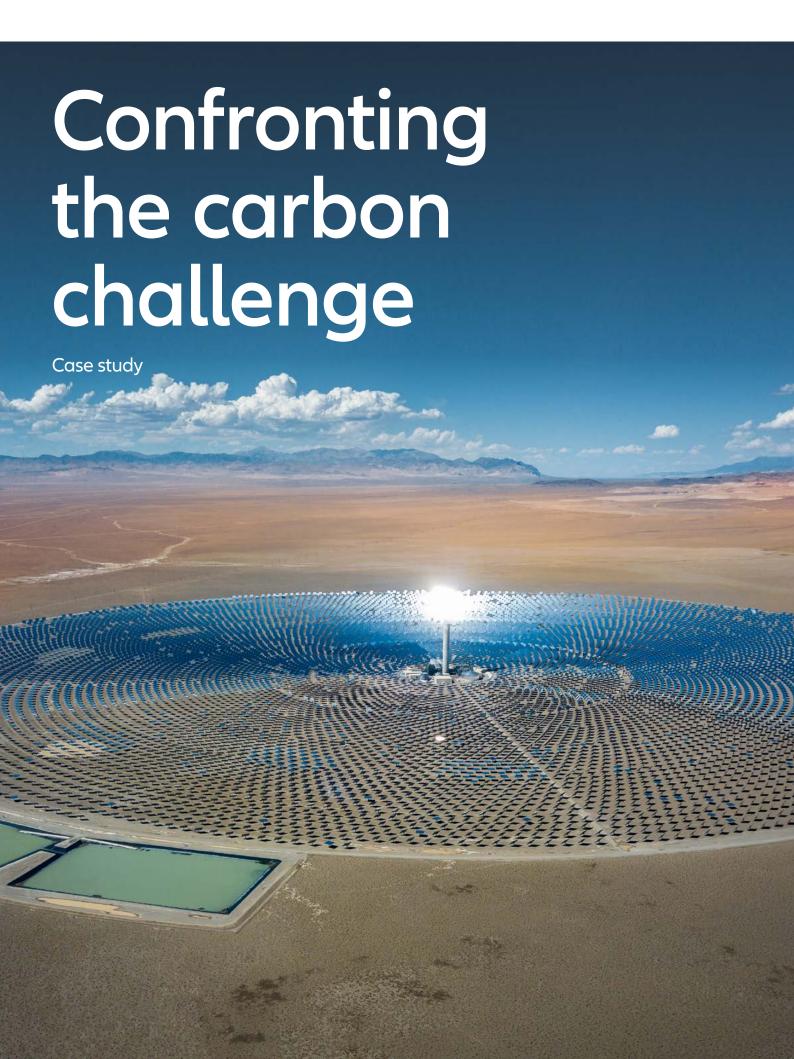
Creating a top-quality portfolio

The investment management process is structured so that the financial and

"Our rigorous investment process considers both financial analysis and ESG analysis to build a strong portfolio"

ESG analysis is combined in our valuation process. ESG analysis and evaluation is included in our assessment methodology in the same way as traditional financial analysis, aiming to construct a portfolio with both an optimal ESG and financial quality profile. An issuer will be included in the portfolio only if the ESG profile and financial evaluation are both positive.

Our proprietary model is a tool that has enabled us to evolve and adapt as this sector grows and changes. It has made it possible for us to include long-term trends like climate change in our process. At the same time, it has also enabled us to meet and exceed the increasing market and regulatory requirements in this space, incorporating new forward-looking analysis and simultaneously delivering financial performance.



AllianzGI manages almost EUR 6 billion of assets that aim for an identifiable environmental impact alongside generating financial returns. Since the launch of our first renewable energy fund in 2013, the Infrastructure Equity team has always followed a central objective: to back green infrastructure assets on a global scale, whether they are wind parks, solar parks or hydropowered projects, alongside related assets. The team continuously screens all the available markets and has carried out investments in Europe. Asia. South Asia and Africa to date.

"Our prime focus is to always think about generating attractive, stable and uncorrelated returns in an alternative asset class that is also highly interesting from its extra-financial performance," says Armin Sandhövel, CIO Infrastructure Equity. "We invest in renewable energy infrastructure and the projects we back ensure that a given country's energy mix is maintained with fewer carbon emissions, compared with a traditional fossil fuel mix."

In 2017 alone, the projects invested in led to 394,282 tons of carbon dioxide emissions being avoided, while producing 1,221,445 MWh of renewable electricity – providing power for the equivalent of 348,984 households.

The Infrastructure Equity team also takes measures to ensure it meets its own ESG requirements. In order to do so, ESG topics are integrated during the set-up of fund documentation. This helps ensure our high standards are implemented.

Martin Ewald, Head of Investment Strategy, Infrastructure Equity says: "From a social perspective, we are careful to ensure that labour and health and safety standards are always front of mind. We work alongside diligent service

"The projects we back ensure that a given country's energy mix is maintained with fewer carbon emissions"

providers to ensure these are all implemented, tracked and adhered to."

The team also has a long-standing relationship with Allianz Climate Solutions, the in-house centre of competence for Allianz covering all topics within the climate space. Its network of experts and technicians advises us on insuring, sourcing and maintaining clean energy developments.

Maintaining good governance practices requires the cooperation of our investors, who have to deal with the rules regarding ultimate beneficiaries. The Infrastructure Equity team works with initiatives such as the UN's Principles for Responsible Investment to help advance investor education and standard setting.

With investor demand for ESG-minded assets growing, it's up to managers to meet this demand, and ensure that their products deliver sustainable, long-term results.

AllianzGI manages 460MW of onshore wind and 370MW of Solar PV in seven European countries for third-party clients. In 2017 alone, these renewable energy investments led to:



394,282 tons of CO₂ emissions avoided



1,221,445 MWh of renewable electricity



348,984 households powered

Real results: ESG in action



"We have made our overall product offering more sustainable"

Gert van de Paal Responsible Investment Strategist at Rabobank

At Rabobank, we want to make sure we have got all those things that everyone feels are necessary – when it comes to responsible investing – in place. In doing so, we are responding to the wide-ranging expectations of our customers.

We believe that by making responsible investment the default for all of our products and customers we can have the biggest impact on capital markets. As a result of our responsible investment policy, we have been continuously raising the standards of all our investment products and portfolios, including a set of minimum criteria for the asset managers on our platform. Managers had to become PRI signatories and start using the UN Global Compact principles as a frame of reference in their investment processes. Additionally, we started an engagement process with those managers who did not quite meet the requirements. Two years later, all active managers on our platform had met these criteria. Since then, we have made steady progress in making our overall product offering more sustainable. One example of this is championing asset managers that are best-in-class in ESG integration and active ownership, as well as adding responsible index funds to our platform. Most recently, we have increased our focus on impact investment products which offer stronger social returns, such as those that contribute to the UN's Sustainable Development Goals. The journey to sustainability is ongoing and one to which we are committed.



"If we want
to ensure a
sustainable
future, we need
to act now!"

Soňa Stadtelmeyer-Petrů ESG & Responsible Investing Expert for the Global Portfolio at Allianz Investment Management SE

Allianz invests more than EUR 690 billion – mainly premiums from our insurance business. We systematically integrate ESG considerations across our entire investment portfolio and we are continuously enhancing and deepening our approach.

At Allianz, we apply an ESG scoring process to systematically evaluate and manage material ESG risks for all our listed assets including sovereign bonds, corporate bonds and public equity. We also evaluate the ESG performance of individual issuers. In fact, the scoring process was developed in close collaboration with our AllianzGI colleagues. Issuers below a defined ESG performance threshold are reported using a "comply-or-explain" approach. Consequently, during an ESG deep-dive meeting together with AllianzGI, we thoroughly discuss and assess the reasoning behind such positions.



"Societies...
demand more
and more that
financial services
providers act
responsibly"

Jörg Ladwein Allianz Investment Management SE, Chief

Investment Officer Allianz insurance investment portfolios for German-speaking countries and AGCS

We have implemented a fully integrated ESG approach covering all asset classes and subportfolios. ESG considerations have been a relevant factor for many institutional life insurance and pension clients for many years. Market management studies confirm that many retail clients consider sustainability aspects in their daily life and that they are interested to learn more about ESG for their retirement savings solutions.

AllianzGI manages our mandates within the fully integrated ESG framework, applying an ESG-scoring approach based on MSCI data. AllianzGI provides additional insights into ESG-related company topics through its dedicated research team.

Responsible investing is evolving from a niche concept to a mainstream idea, with a focus on integrated approaches. This is also driven by more and more regulatory requirements. In addition, there is growing demand that financial services providers act responsibly, not only in their operations but also when investing money on a client's behalf.

Real results: ESG in action



"The current system is not sustainable and, within 40 years, if we carry on with business as usual, we know that we are heading for disaster"

Philippe Desfossés CEO ERAFP, France

Our strategy is determined by the nature of our pension fund. Structurally, we are very long-term investors and we are also a young pension fund. We must consider the risks and also the opportunities which may arise in the context of what we should refer to as a transition towards a more sustainable and lower carbon-intensive, or even a carbon-free, economy. The current system is not sustainable and, within 40 years, if we carry on with business as usual, we know that we are heading for disaster. So, someone who is 20 years old today is not indifferent to the investments we make and the criteria we use.

I believe that when our investment strategy was

put in place, our board members intuitively felt that maximising short-term profit, rather than sustainable long-term profit, was contrary to the long-term interests of subscribers. But how can it be implemented? Well, it has to be done pragmatically, as we are talking about transition rather than disruption. However much we wish to see the end of fossil fuels, it is not going to happen overnight. The transition therefore has to be organised in a way that causes the least disruption possible to the economy. We have to try to make it happen as quickly as we can and ensure that it filters through to the entire economy.

We believe that an effective SRI strategy for large institutional investors needs to be implemented via a global best-in-class approach. In any case, we avoid sector biases in the sense of opting for zero exposure to certain sectors. This does not prevent us from applying rigorous screens.

I also believe that it is in our interest, as we no longer wish to find that our assets could be stranded tomorrow. On the contrary, we would like to try to capitalise on opportunities during the transition towards an economy with a greater focus on resource-use efficiency, which also prefers services over ownership.

The team at AllianzGI clearly states its desire to abide by its convictions. For us, it is important to have real convictions, rather than a simple marketing ploy, and that there is genuine underlying commitment. And the current mandate is performing, not just in terms of purely financial returns, but also on the ESG front. For example, we pay attention to the annual general meetings (AGM) voting policy applied by asset managers. We believe AllianzGI has managed to take our concerns into account, which is a truly important factor, obviously above and beyond purely financial issues, but also in terms of ESG engagement.

Failing to take sustainability into account for a very long-term investor makes no sense. This attitude would be just about understandable for a fund manager investing on a two-month horizon, but it cannot be justified for very long-term managers.



"Two thirds of our new clients are already choosing a sustainable portfolio"

Guy Janssens Head of Sustainable and Responsible Investments, BNP Paribas Fortis Private Banking, Belgium

Our management decided two years ago that SRI solutions are the first offering to our end clients, for different reasons: by integrating ESG in our investment offering we can increase the longer-term risk/return profile. Next to that we decided to invest in the sustainable themes of the future (climate change, diversity, recycling, healthy living, water, etc). We see also more SRI awareness among our clients who want both financial performance and a positive social and environmental impact.

We work in an open architecture environment, so we select the best investment ideas for our clients. For us, AllianzGI is an important asset manager that understands our needs. Together we promote sustainable investing in Belgium and Europe.

As a big international group we prefer to work with strong partners, like AllianzGI, who have dedicated professional sustainable solutions in different asset classes: green bonds, European equities, European corporate bonds and global equities.

Today, two thirds of our new clients are already choosing a sustainable portfolio. This represents 28% of the off-balance products at BNP Fortis Private Banking in Belgium. Our target is to achieve 100% sustainable solutions.

Not only is our business becoming more SRI focused, but our company is doing more to improve our ESG profile with dedicated environmental, social and corporate governance targets. This involves our 300,000 employees worldwide.



"Achieving real-world impact while improving portfolio carbon performance"

Matthias Seewald Allianz France Board Member Chief Investment Officer

ESG has been a growing focus for Allianz France: we operationalise group ESG integration frameworks into our daily investment activities with a French touch, from clearly defined exclusion policy, asset manager selection and monitoring, to reviewing, reporting, voting and engagement. We deepen our understanding of ESG by conducting diverse research projects, with topics ranging from avoiding carbon emissions and climate value at risk, to physical risk assessment. Our clients are increasingly asking for ESG-relevant products.

Our Investment team works with AllianzGI on a regular basis along the investment lifecycle and across different asset classes. We appreciate the sustainability related insights that we receive from AllianzGI. For example, in evaluating our existing green bonds portfolio, we benefit from exchanges with green bonds experts at AllianzGI, from market definition, standards, risk return and ESG Impact Assessment.

Another example is that besides climate focus, AllianzGI helps us to shed some light on broader natural capital investment which contributes to drawing a roadmap for our investment, in line with Sustainable Development Goals other than carbon.

Through our bi-annual ESG deep-dive meeting with AllianzGI to discuss below-threshold issuers as defined by the Allianz ESG scoring method, we think of AllianzGI's commitment to achieving real-world impact while improving portfolio carbon performance as in line with our own ESG strategy, i.e. using both investment and engagement as levers to actively manage the portfolio and lead to positive impact.

Room



ESG strategies appeal to a broad cross section of investors, with especially high interest from those 65 and older, according to ESG Clarity, a survey among retail investors in the US commissioned by Allianz Global Investors

Lack of awareness

4%

could explain what the letters ESG stand for

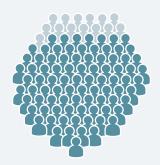
Well worth discussing



65%

who spoke to their advisor about ESG pursued the investment

The opportunity



86%

of investors say their financial advisor has not discussed ESG as an investment strategy

Source: ESG Clarity Survey 2017 among US retail investors with more than \$100,000 investable assets.

The ESG conundrum

Money is flowing into ESG strategies, with close to USD 9 billion invested in the US alone by the end of 2016, according to The Forum for Sustainable and Responsible Investment. Although this figure is growing, it is still small in comparison with the USD 21.1 trillion invested in US mutual funds, exchange-traded funds and institutional funds reported by the Investment Company Institute.

While the majority of investors have never heard of "ESG" by name, 90% of survey participants claim they care about at least one of these underlying issues: protecting the environment, social responsibility, and fair and transparent corporate governance.

Most investors do not, however, follow through with this when investing: only 20% of all respondents factor ESG into their investments, versus 80% who practise personal ESG.

This disconnect between what investors say they care about and believe

in, and where they invest, is primarily due to a lack of awareness. Two thirds of investors surveyed were not familiar with ESG as an investment strategy.

Many of the investors surveyed (42%) are sceptical about ESG investing, believing that they would have to sacrifice returns. In addition, 90% believe that though people say they care about ESG, returns are still the most important factor for investors. This stigma and a lack of education around ESG could be slowing adoption. While many retail investors choose ESG products to feel that their money is making a positive impact on society, few realise that studies show that ESG can mitigate risk without negatively affecting financial returns.

Call to action

Financial advisors are largely missing the ESG opportunity with their clients. Only 14% of investors say their financial advisor has discussed ESG as an investment strategy, and of those that have had a conversation, nearly twothirds (61%) brought it up themselves.

There are some positive signs, however, as 74% of respondents wish there was more information available about ESG investing and 65% of those who discussed ESG with their financial advisors went on to invest in a responsible product. Though there may be a general lack of awareness, once investors know about ESG they are intrigued. Interestingly, a survey by the Italian Forum for Sustainable Finance vielded similar results. While more than four in five respondents find ESG criteria important, only 7% were proposed responsible or sustainable products. As a result, the lack of opportunity to discuss ESG is the main reason for not investing.

The online survey of 1,061 US investors aged over 25 with \$100,000 or more in investable assets was conducted by AllianzGI in partnership with market research company GfK in June 2017.

The sovereign bond factor

Sovereign bonds have never been overly scrutinised from an ESG perspective – until now

ESG is not only a topic for equities. Mainstream investors have also started applying ESG risk factors in the credit analysis of corporate bonds. Yet sovereign bonds – which account for a large share of global financial assets at an estimated volume of USD50 trillion – are being overlooked.

Sovereign bonds for developed countries are usually considered safety assets, with no credit risk to preserve capital in extreme market situations. Those in emerging countries, on the other hand, often aim to earn attractive returns with little credit risk and volatility.

By integrating ESG factors in sovereign bond portfolios, investors seek to:

- •Enhance the credit risk analysis of sovereign bond issuers
- •Optimise risk budgeting and country allocation
- •Make better-informed investment decisions

Our recent research looked at the financial materiality of ESG factors in emerging and developing countries, producing three key findings.

Country credit ratings appear not to fully incorporate sovereign issuers' ESG risk factors

Credit ratings are one of the main anchors of credit information in the market, and a key input in allocation and risk budgeting. We found that countries' ESG risk scores and given credit ratings do not align closely, and disperse more

widely at lower credit ratings in emerging and frontier markets.

Interestingly, there are few "ESG stars" outperforming – or "ESG laggards" underperforming – their peers. Laggards might be in for a credit-rating downgrade, while stars can benefit from a rise. Investors could capitalise on these investment signals with a momentum strategy that reappraises these outliers appropriately.

ESG risk is priced into sovereign credit risk – better ESG scores are reflected in lower sovereign credit default swap spreads

Our research suggests that ESG risk factors have become more significant in explaining sovereign bond spreads, especially after 2007's financial crisis. We can observe an inverse, non-linear relationship between countries' ESG risk scores and their credit default swap (CDS) or bond spreads, where markets seem to especially penalise the lowest-scoring countries.

Further analysis suggests that the median and dispersion of CDS spreads also increases at lower ESG scores, while developed and emerging country issuers with better ESG scores benefit from lower borrowing costs. This implies that capital markets are already pricing ESG risk to some degree in sovereign bonds.

ESG performance therefore matters for both emerging and developed countries, and may be used for credit-risk pricing models. This can help



investors adjust their credit ratings according to information available about material ESG risks.

Bad sovereign governance is a key risk – ESG risk is long-term in nature

Data suggests that the financial materiality of ESG factors for sovereign bonds varies, with different degrees of materiality for individual factors. In general, governance risk factors appear to be the most material, followed by social risk factors.

Our research also found that ESG risk factors become increasingly material over time and can be viewed as long-term in nature. In sovereign bonds portfolio practice, this means these factors could remain undetected for a significant time before being suddenly triggered, leading to a fundamental change of credit change risk of a sovereign issuer. ESG tail risks should therefore be anticipated as much as possible by evaluating early warning signs. As a concrete example, in our research whitepaper (see QR code) that was published mid-2017, we had placed a specific spotlight on Turkey. Back then we had already warned that the market seemed to be too complacent on governance and social risks when looking into CDS spreads and credit ratings of Turkish sovereign bonds. Throughout 2018, the risk has materialised.

Conclusions

Our research provides significant evidence that ESG risk factors are not fully reflected in sovereign credit ratings.

For the same credit-rating bands, ESG risk scores may deviate significantly. Since portfolios typically rely on credit ratings as a means of defining their eligible investment universe and country allocation, we consider this an important finding. Investors might capitalise on this, as it seems ESG risk scores are increasingly factored into sovereign bond issuers' credit risk as measured by CDS spreads, particularly governance and social factors. As a result, ESG risk scores may contribute to a more effective sovereign bond credit-risk budgeting and country allocation. Tail risks may also be mitigated through ESG risk factor integration into sovereign issuer credit analysis.

This may enable sovereign bond investors to better meet their investment objectives. In developed markets, this is largely through preserving capital when the market is distressed, whereas for emerging markets it is through a risk-controlled credit premium.

Narrowing the inequality gap

The system is near breaking point – that is why we must repair economic inequality



Neil Dwane Global Strategist

Economic inequality is one of the most pressing social and economic issues facing the world today: it negatively affects human lives, slows economic growth and destabilises social systems.

Several factors are driving this trend. Globalisation has hollowed out manufacturing industries in developed countries, and the rise of robotics, automation and AI threatens future jobs. Fewer opportunities to work means income and wealth inequality will worsen.

The deregulation of financial markets has arguably helped those who have wealth to increase it – particularly since the 1980s. By contrast, the large number of people who cannot invest in risk assets have found themselves left increasingly behind.

In developed markets, a decreasing number of wealthy individuals are shouldering more of the tax burden while pressure increases on social services, with fewer people able to afford medical care, retirement savings or even basic living expenses. It can be worse in emerging markets, where few own their homes or have sufficient savings.

Inequality also breeds distrust. In today's increasingly transparent world it is easier to perceive financial differences. This promotes populist policies and makes people more stressed, less healthy and more inclined to make risky financial decisions.

Though there is no easy fix, policymakers, companies and investors can help narrow the inequality gap in the following ways:

- Promoting personal savings and investments
- •Offering access to and reducing the fees charged for financial services



- •Making regulation and tax reforms fairer and less politicised
- •Improving the use and efficiency of social security
- •Overhauling education to promote workers' skill sets
- Promoting a collaborative approach to training, investment and support
- •Pressuring companies to focus on ESG factors

At AllianzGI, we constantly work towards applying the power of active management to real-world issues. We aim to add value beyond economic gain by aligning our interests with those of our clients and communities, while directing capital to promote future growth in a more sustainable and equitable way.

"Though there is no easy fix, policymakers, companies and investors can help narrow the inequality gap"

The impact of "green"

Green bonds remain the subject of much debate – but now opportunities will enable investors to be more active than ever



Julien Bras SRI Fixed Income Portfolio Manager

Although the green bonds market has existed for more than 10 years, it still triggers much debate. Some of the questions are fully justified, whereas others now seem to have been answered.

This is particularly the case regarding the definition of green bonds and, more broadly, what defines a green project or business. As we hoped, a regulatory definition is currently being established. The final definition is expected to be very close to current market practices, i.e. covering projects that comply with the green bond principles and are deemed eligible based on a relatively consensual classification similar to the existing ones.

The new regulatory definition will answer a number of questions and should, above all, open fresh development opportunities in this market.

First, there will be opportunities for investors, who will see their investment allocation possibilities broaden to include green solutions. As a result they will be able to participate more actively in the reallocation of their heavily carbonated investments towards a low-carbon economy.

Second, the public authorities will have a clearly-defined financial instrument at their disposal which they will be able to associate with mechanisms designed to incentivise issuers. Whatever type of incentive is deployed, it can be

used as leverage for the development of further green bond issues, implying a greater number of green financing projects.

Last, and most importantly, it will make it easier for issuers to identify projects considered eligible for green financing. This will help corporates and more specifically industrial groups, which are relatively inactive in this segment. This will enable them to tap this market more easily, without fearing a negative reaction because of the selection of a non-consensual project. Given the heavy environmental impact of industries in general, this will provide a key step towards complying with 2-degree scenario targets.

This point raises questions: which issuers will be legitimate in using the green bond market for securing funding? Are certain industries or sectors automatically excluded? Will only the companies with the best current environmental track record be able to issue green bonds?

If the goal is to reward best practices, yes, there is no doubt that this will be the case. However, if the goal is to promote transition to low-carbon models, then access to this market should be open to as many issuers possible. Although access must not be granted at any price or without conditions, if a company with a heavy environmental footprint is striving towards a credible and ambitious transition strategy to





"If a company with a heavy environmental footprint... has resolved to implement a strategy to reduce its impact, it must be given encouragement and guidance"

reduce its environmental impact, it must be given encouragement and support.

Having faith in a company stating this type of ambition is no different from accepting a management team's word regarding their guidance in terms of earnings growth, deleveraging or margin improvement targets. Observation over time will distinguish reliable issuers from the unreliable ones.

The automatic exclusion of a number of industries based on their current negative impact, without accepting that they may be able to significantly reduce their footprint, excludes all possibility of transition towards a low-carbon economy.

Gauging environmental impact is the other key area that needs to be developed almost from scratch

Claiming that a given investment will have a positive impact on energy and climate transition is not enough. The impact has to be demonstrated, or even better, quantified. Although there is a broad consensus regarding the most relevant indicators, notably calculating $\rm CO_2$ emissions avoided, there appears to be no single indicator applicable to all types of projects and in all contexts.

A multifaceted impact assessment is therefore needed, which is not a complicated issue. However, although detailed indicators are required, focusing on data should not eclipse the key investment rationale, namely the participation in financing a transition towards reduced-carbon models. In certain cases therefore the qualitative assessment of an investment will perhaps be more relevant than striving to define a standardised indicator. The relevance of an investment aiming to preserve and restore the biosphere of oceans, which are carbon sinks or the value of a reforestation project in an overexploited region, cannot be denied. How many tonnes of CO₂ emissions have been avoided? Is this really what counts?

Not all examples are as simple to gauge, and although the impact of some industries can easily be measured, a different rationale will be required to account for those necessary investment choices whose impact may not be quantifiable. Investments in development solutions, particularly industrial projects, are a good example. Some projects, without necessarily having a direct positive impact, or perhaps even negative, will nonetheless promote transition towards a lowercarbon model and will not have to be ignored.

Let's not lose sight of our initial aim: promoting a sustainable future for our economy.

Facing down the opportunities and challenges



AllianzGI does not only consider ESG factors in investment decision making, we also play an active role in helping shape the future of ESG investing at large within asset classes or in the markets we operate. In this section, experts who are actively supporting some of these important initiatives briefly outline key trends in the industry.

In addition to the associations and initiatives that are mentioned in the short commentary sections, AllianzGI is a member, affiliate or official supporter of the following national or international organisations and initiatives: Asian **Corporate Governance Association** (ACGA), Carbon Disclosure Project (CDP), Climate Bonds Initiative (CBI), Chaire Finance Durable et Investissement Responsable (FDIR), Foro de Inversión Sostenible de España (Spainsif), Forum pour l'Investissement Responsable (FIR), Forum Nachhaltige, Geldanlagen (FNG), green bond Principles (GBP), **International Integrated Reporting** Council (IIRC), Vereniging van Beleggers voor Duurzame Ontwikkeling (VBDO).



Marie-Sybille Connan Senior ESG Research Analyst

Investors will also need to step up their efforts on the engagement side to fight climate change. We are an active participant of Climate Action 100+, a five-year initiative established by Asia Investor Group on Climate Change, Ceres, Institutional Investor Group on Climate Change & PRI. This initiative is led by investors to engage with the world's largest greenhouse gas emitters to improve governance on climate change, curb emissions and strengthen climate-related financial disclosures."

Marie-Sybille is actively supporting the Climate Action 100+ initiative to collectively engage with the world's 100 largest GHG emitters to curb emissions and strengthen climate related disclosure. She also works on the corporate governance committee of the French trade body Association Française de la Gestion Financière (AFG).





Martin Ewald Head of Investment Strategy Infrastructure Equity

Impact Investing is the fastest growing investment strategy in Europe. However, there is no clear definition and consensus in the market on impact investing yet. Additionally, reporting on SDGs is still at a very early stage."

Martin is Co-Chair of the UN PRI Infrastructure Advisory Committee to help shape the framework for sustainable infrastructure solutions in developed and emerging markets. He also represents the firm at the Global Impact Investing Network (GIIN) dedicated to increasing the scale and effectiveness of impact investing around the world.



Irshaad Ahmad Head of Institutional Business Europe

Institutions are keen to learn how they can implement ESG strategies in fixed income and in alternatives.

The next few years will be crucial for them in relation to how they want to approach the topic, e.g. should they link their investments to specific UN Sustainable Development Goals (SDGs) or define an SDGs score for their portfolios."

Irshaad is on the Steering Committee of the World Business Council for Sustainable Development (WBCSD) 'Aligning Retirement Assets' initiative, enabling companies to better align retirement assets, including defined benefit and contribution plans, with their overall sustainability goals by integrating ESG considerations. Irshaad is also a board member of the UK industry body Investment Association (IA).



Isabel ReussGlobal Head of SRI Research

Climate change is and will likely remain at the forefront of investors' ESG agenda. Clients are looking for solutions in the climate change space which go beyond current focus of the industry on carbon foot-printing and fossil exclusion / low carbon products. The industry needs more innovative products enabling the transition to a low carbon economy and engagement with companies to encourage and push for this transition."

Isabel is a member of the Italian Forum per la Finanza Sostenibile and plays a major role in promoting sustainable finance in the Italian market place. She has contributed extensively to AllianzGI proprietary SRI rating methodology and the implementation of SRI Filters across asset classes. She is a member of the Corporate Governance Commission at Germany's investment professionals association DVFA.



Nina Hodzic ESG Integration Manager

Investors (both asset managers and asset owners) are increasingly looking at how companies are performing from a diversity perspective. For example, they expect boards with no or minimal female representation to address their diversity issues. Large asset owners are asking more questions to asset managers, not just on how they incorporate diversity factors into their investment analysis and stewardship practices, but also whether they have diversity policies in place in their own companies and what the corresponding figures and targets are. We expect this trend to continue due to increased evidence of the benefits of effective diversity efforts as well as regulatory developments such as quotas or disclosure requirements."

Nina is on the Steering Committee of the World Business Council for Sustainable Development (WBCSD) 'Aligning Retirement Assets' initiative. She is also a member of the Institutional Investor Group on Climate Change (IIGCC) Scenario working group, which focuses on developing an investor guide on climate-related scenario analysis in line with the TCFD recommendations. The guide is intended to help investors navigate different types of scenario analysis tools and methodologies available and inform their selection. Nina is an Advisory Board member of LeaderXXchange, a change-driven organisation that advises and promotes diversity and sustainability in governance, leadership and investment. She is also actively involved in AllianzGI's internal diversity initiatives.



Steffen HörterGlobal Head of ESG

We expect in particular the EU action plan on Sustainable Finance to further accelerate market adoption of sustainable finance and ESG investments. As well as the broad scale corporate engagement triggered by the Task Force on Climaterelated Financial Disclosures (TCFD) and Climate Action 100+. You can watch a growing consensus that carbon exposure is a risk in investment portfolios that needs to be managed. Asset owners who have been standing on the sidelines are now more alerted on ESG. In our international client meetings I see the ESG momentum in the US and Asia, in particular Japan, speeding up too. Beyond institutional clients like pension funds, family offices and private wealth managers are very interested in our ESG investment solutions. On the retail side, especially millennials and female clients increasingly inquire not only about investment performance but also what's done with money, what value it generates for society and how it preserves the interest of the next generation. Education and guidance of retail investors, including transparency about ESG on the fund level, is key."

Steffen is a member of the EU Commission's Technical Expert Group on Sustainable Finance which advises the Commission in the development of a unified classification system for sustainable economic activities, an EU green bonds standard, requirements for low carbon and ESG indices, and metrics for climate-related corporate disclosure. He was a panel speaker on ESG integration across asset classes at the PRI in Person 2017 conference. Steffen is also a member of the IIGCC and of a working group on responsible investing at the German asset management association BVI.

"You can watch a growing consensus that carbon exposure is a risk in investment portfolios that needs to be managed"



Eugenia Unanyants-Jackson Head of ESG Research

Consistent with our investment philosophy and approach, we routinely engage in dialogue with investee companies and seek proactively to present a viewpoint, seek change where necessary, and monitor the results of our engagement. Last year's AGM season was a wake-up call for many companies to take investors' concerns, especially in ESG context, seriously, and I would expect many to start adapting to globally rising standards. For 2018 we do not expect a radical shift in the areas of most serious scrutiny, however, we will step up engagement with issuers where our analysts and portfolio managers discern a weak connection between a company's strategic objectives, business value drivers and business practices."

Eugenia represents AllianzGI in a number of investor groups and trade associations, including International Corporate Governance Network (ICGN) and US Council of Institutional Investors (CII) which focus on advancing corporate governance standards globally and in the US respectively as well as the UK, the Investment Association, the UK Investor Forum and European Fund and Asset Management Association (EFAMA).



Paul Schofield Senior SRI Portfolio Manager

Over the last two decades, we have seen an exponential rise in client demand for sustainable investment. And while markets have embraced the trend at different speeds, they are increasingly aligned in their approach. Recently, the onus has rightly shifted on to managers to deliver solutions that are clearly accountable and deliver measurable change."

Paul is a member of the UK Investment Association's (IA) committee for Sustainability and Responsible Investment. He is also the lead portfolio manager for AllianzGI's flagship global sustainability strategy and has been involved since its inception in 2001.



Editor **Steffen Hörter** Global Head of ESG, Frankfurt

Project leads **Stéphane Choukroun** Marketing Manager, Paris

Marc Savani Strategic Content Lead, Frankfurt

Pictures and illustrations supplied by Getty Images



AllianzGI is committed to unlocking the potential of ESG across the globe. We hope you will join us on this journey.

Where does your journey start? Contact AllianzGI today.

Get active, Click here https://www.allianzgi.com/en/our-firm/esg/our-approach

Investing involves risk. The value of an investment and the income from it will fluctuate and investors may not get back the principal invested. Past performance is not indicative of future performance. This is a marketing communication. It is for informational purposes only. This document does not constitute investment advice or a recommendation to buy, sell or hold any security and shall not be deemed an offer to sell or a solicitation of an offer to buy any security.

The views and opinions expressed herein, which are subject to change without notice, are those of the issuer or its affiliated companies at the time of publication. Certain data used are derived from various sources believed to be reliable, but the accuracy or completeness of the data is not guaranteed and no liability is assumed for any direct or consequential losses arising from their use. The duplication, publication, extraction or transmission of the contents, irrespective of the form, is not permitted.

This material has not been reviewed by any regulatory authorities. In mainland China, it is used only as supporting material to the offshore investment products offered by commercial banks under the Qualified Domestic Institutional Investors scheme pursuant to applicable rules and regulations.

This document is being distributed by the following Allianz Global Investors companies: Allianz Global Investors U.S. LLC, an investment adviser registered with the U.S. Securities and Exchange Commission; Allianz Global Investors Distributors LLC, distributor registered with FINRA, is affiliated with Allianz Global Investors U.S. LLC; Allianz Global Investors GmbH, an investment company in Germany, authorized by the German Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin); Allianz Global Investors (Schweiz) AG, licensed by FINMA (www.finma.ch) for distribution and by OAKBV (Oberaufsichtskommission berufliche Vorsorge) for asset management related to occupational pensions in Switzerland; Allianz Global Investors Asia Pacific Ltd., licensed by the Hong Kong Securities and Futures Commission; Allianz Global Investors Singapore Ltd., regulated by the Monetary Authority of Singapore [Company Registration No. 199907169Z]; Allianz Global Investors Japan Co., Ltd., registered in Japan as a Financial Instruments Business Operator [Registered No. The Director of Kanto Local Finance Bureau (Financial Instruments Business Operator), No. 424, Member of Japan Investment Advisers Association and Investment Trust Association, Japan]; and Allianz Global Investors Taiwan Ltd., licensed by Financial Supervisory Commission in Taiwan.