



Your success. Our priority.

CONTENTS

01	Foreword)))
02	Portfolio Manager Viewpoint6	ò
03	Country Head Focus –	
	Germany10)
04	Carbon Offsetting: New or Improved?12	2
05	Behavioural Finance: Inadequacies of Forecasting15	

Stewardship in action

06	Annual Voting Summary	20
07	Voting Q4	23
08	Engagement Highlights	24

01 Foreword



lain Richards Head of Responsible Investment

Responsible investment (RI) continues to evolve at pace but, as we look towards the year ahead, the key RI themes are already evident: technology; regulatory changes; enhanced analytics; active use of voting rights; and thematic issues (eg, climate change or the sustainable development goals). Much of this reflects the growing focus among policy makers and regulators seeking to mobilise private capital in response to the broader public policy agenda. Their actions, together with a shift in the public debate, have also caught the attention of asset owners including insurance companies and pension schemes. As new players

begin to explore the field, and existing ones revisit their approaches, two trends have become apparent.

Enhanced analytics

Firstly, a renewed interest in and focus on the question of "substance-overform". Asset owner concerns about "greenwash" have increased, reflected in a more detailed review of how environmental, social and governance (ESG) research and analysis are used, align with and are integrated into investment strategies. Concerns about inconsistencies between the outputs from ESG ratings agencies, the quality of data, and mixed evidence on performance enhancement persist. even as the flow of assets into RI funds continues to grow. This is driving interest in new, improved approaches and economics, enhanced analytics and investment relevance are key for this.

Work by MIT Sloan School of Management illustrates the substantial disparity that exists between the ratings that ESG agencies calculate for companies. The correlation (1.0 being perfect correlation and consistency) among ESG ratings was found to be as low as 0.42; by contrast, the correlation between Moody's and Standard & Poor's credit ratings exceeds 0.98.¹

Thematic issues

Secondly, the focus on thematic issues in investment continues to grow. This is most apparent in terms of the growth of interest in climate change strategies. However, whilst some in the market are properly investment focussed, others are agenda driven (although few in the industry will admit to this divergence). Nonetheless, recognition of the climate challenge will continue to grow as we head through 2020; both regulatory interventions and the broadening use of the term "climate change emergency" will ensure that. Set against this background, new investment analytics that go beyond generic "exposure" models will be needed, supporting a more sophisticated approach to the assessment of transition and physical risk. This will be an important development if asset owners are to have the ability, as they adopt or develop their climate responses, to ensure that investment discipline and focus is maintained.

Then there is the majority of asset owners who are yet to adopt RI strategies. As the focus increases on sustainable outcome and social impact orientated strategies, the continued relevance of traditional approaches that reflect exclusionary SRI (socially responsible investing) or green overlays is likely to come under scrutiny. However, some care will still be needed to identify the truly thematic strategies such as our own growing social bond franchise. As with most "labels" in the RI space, the risk remains that the definition of the term "thematic" will be stretched to enable extant "non-thematic" activities and approaches to be accommodated.

Nevertheless, the key demand remains for asset owners to have access to effective investment approaches, those that enable, say, insurance companies to match their liabilities or pension schemes to satisfy their pension obligations. The wider policy agenda and needs will not replace this.

2020: a defining year

So in summary, I believe that 2020 will be a defining year for RI. The investment industry needs to up its game if it is to avoid the mistakes of the past. The assertion that there is no more debate to be had about ESG and performance remains a brave one and this, in part, may be why a new move is afoot to challenge the concept of the fiduciary duty in an RI context: this time to assert recognition of wider public policy agendas and drive their inclusion into statements of investment principles and investment management agreements. The dramatic change to come will need new approaches and will create new challenges. That said, good research and analytics will remain the bedrocks of effective investment management, taking into account the macro risk backdrop (see Figure 1 for an extract from the World Economic Forum 2020 Risk Report,¹ which provides an

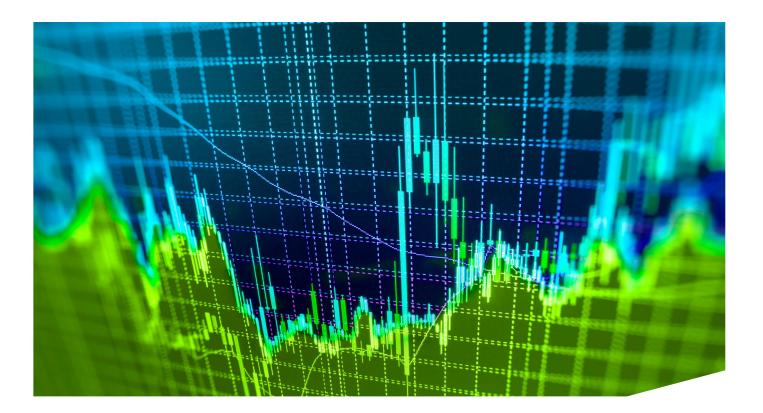
update on the most significant global systemic risks – the top five of which, for the first time in the report's 15-year history, relate to environmental themes).

However, as these changes play out, and at the risk of pouring cold water on the debate, there is one related and very significant observation to make about the outlook for 2020.

Equity markets are already offering early indications of valuation bubbles amongst SRI "darling" or "green" stocks. The driver for this may well be behavioural – has overlaying new standalone green objectives in equity strategies diluted exit disciplines? – but in a market downturn, there is a risk that valuation bubbles could create a significant performance issue for funds should they suffer an outsized de-rating.

Source:

1 https://www.weforum.org/reports/the-global-risks-report-2020



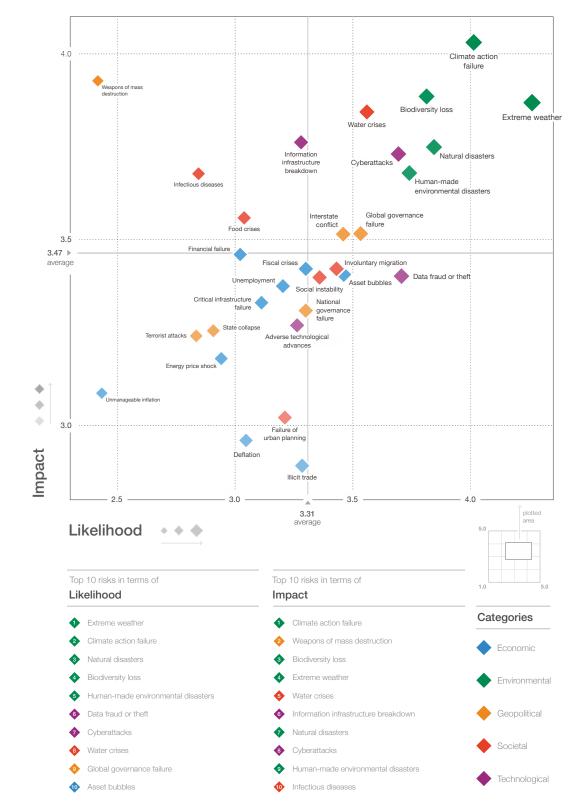


Figure 1: The World Economic Forum Global Risks Landscape 2020

Source: World Economic Forum Global Risks Perception Survey 2019-20.

02 Portfolio Manager Viewpoint



Simon Bond Director of Responsible Investment Portfolio Management

Sovereign green bonds dominated the market in 2019, driving the impact bond market more generally, which has seen increased issuance, innovation and a significant leap in interest from clients. Our social bond franchise has now passed the milestone of \$500 million assets under management, with growth across the UK, European, US and global social bond strategies.

Why has the past 12 months been so significant? Climate change and social inequality are exploding into the public consciousness on a global scale. Extinction Rebellion in the UK and the "Gilets Jaune" in France are just two of the more high-profile signs of this, but in financial markets too, green, social and sustainability bonds are growing in number and sophistication.

After two flat years, 2019 saw green bonds catch their second wind, with a resurgence of issuance (Figure 2). It was also a positive year for the social bond sector, while the biggest growth was seen in sustainability bonds, with the big theme here being their alignment to the UN's Sustainable Development Goals (SDGs).

We believe 2020 will see more of the same. Furthermore, there is likely to be more innovation during the year, perhaps with the first issue of a "transition" bond that finances the evolution of a business to a more sustainable model.

Detailing the resurgence

Global green, sustainability and social bond issuance for last year reached \$196 billion by early November, compared with \$133 billion for the whole of 2018.² Green bond issuance rose by almost 40% and accounts for three-quarters of the broad impact bond market; sustainability bond issuance almost tripled, albeit it from a low base; and only social bond issuance lagged, with issuance growing just slightly from 2018.³

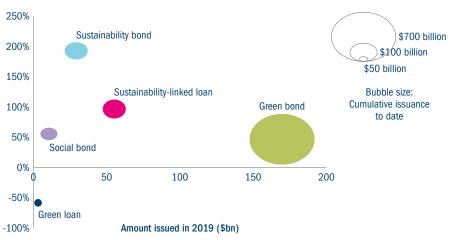


Figure 2: Growth rate 2018-19

Source: BloombergNEF as at August 2019. For illustrative purposes. Note: 2018/19 values are between 1 January and 13 September for each respective year. Sustainability linked bond excluded. Cumulative issuance is across all years.

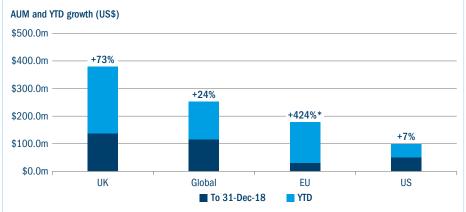
Dominating the market in 2019, however, was sovereign green bonds. France's green OAT bond is the biggest (€20.7 billion), followed by those from Belgium (€6.9 billion), the Netherlands (€6 billion) and Ireland (€5 billion).⁴ Italy, Sweden and Germany, meanwhile, are expected to issue green or sustainability bonds in 2020. Notable by its absence is the UK government, where we have been leading a lobbying campaign for the first green gilt.

This revival makes 2019 the most significant year for the impact bond market generally since 2017. However, it's not just issuance that signals the market is enjoying a new lease of life; last year also saw more innovation, including Spain's first bank social bond, from CaixaBank, as well as RBS's social bond, the first of its kind from a UK bank. Italian energy giant Enel, meanwhile, issued a general corporate purposes bond with a coupon linked to its performance against the SDGs.

How are we doing?

Performance in 2019 was very pleasing (Figure 3). We were delighted to see increased flows across the Social Bond franchise, with a 73% rise in the UK, a 424% increase in Europe, as well as repayment of its seed capital, and a 7% increase in the US,

Figure 3: Social bond franchise in numbers



Source: Columbia Threadneedle Investments, as at 31 December 2019 (*excludes repayment of seed capital).

which also managed to repay its seed capital. The Global version, meanwhile, saw a 24% increase. All of which meant we now have a \$500 million social bond fund franchise.⁵

How are we doing this?

You do not have to sacrifice financial returns to do good. The financials of a potential investment are always our first and foremost concern – if a company goes bust it cannot deliver either the financial return or the impact. Secondly, we look at controversy and ESG. Before we get to analysing the potential impact an investment might have, we look at culture and materiality of the issuers/ firms involved and how they manage and respond to controversies – this tells us about the wider management culture and whether we can expect appropriate responses to incidences across the board. Only then, if the first two filters are successfully negotiated, do we start to talk about externalities and the impact a company's business has on its market, staff, community etc. We believe this process is a key part of why we have been so successful with our social bond funds.

The next chapter

Looking to this year, the surge in volumes and innovation is likely to continue. Not only are more sovereigns expected to issue green bonds for the first time, we also expect to see impact bonds broadening out to include more sustainability and social bond issues. We're certainly not short of projects in which to invest. Also, disruptive technologies have already implemented change at a ferocious pace, and markets need to have that kind of pace of change themselves to respond. So, we don't see issuance slowing down.

Increased regulation of economic activities will also be forthcoming in the form of the EU's "taxonomy" rules which are scheduled for 2021, particularly on the environmental side. This will be complex and detailed and resource-heavy, but we are well positioned to respond to it. And in any case, would you rather be invested in a fund that is going to benefit from regulation or one that is going to suffer?

The year's major event will be the COP26 environmental conference in Glasgow at the end of the year.

How will it follow the 2016 Paris Agreement targets to mitigate greenhouse gas emissions? Will it encourage competition among nations to set more ambitious carbon reduction targets, and will it lead to new innovations in the bond market, possibly a net zero green bond? We are optimistic about the potential for financial markets to step up to these targets and help make them happen.

More generally, with monetary policy seemingly reaching the limits of its effectiveness, another approach is required for Europe (and perhaps beyond) to avoid "Japanification". We believe a focus on green and sustainable investment could not only stimulate growth, but also bring about social and environmental benefits. It is time for a different approach which can help deliver growth in a way that will not only help the economy, but also society and the environment, hence our call – in the UK at least – for the government to launch green government bonds or gilts.

I would like to see more funds like ours that effectively democratise finance. If people can put green, social or sustainability bond funds into tax-efficient vehicles including pensions, they can vote financially for what they believe in. However, we also need to see a large proportion of institutional money moving into these bonds. Last year showed the momentum is growing, but there is a long way to go.

Source:

- 2 Bloomberg, 2019.
- 3 Bloomberg, 2019.
- 4 Columbia Threadneedle Investments, 2019.
- 5 Not all vehicles are available to all investors or in all jurisdictions. Certain products may be offered by affiliates.



03 Country Head Focus – Germany



Florian Uleer Country Head of Germany

While the country may have lagged other European countries in developing green finance, it is taking measures to nurture rapid growth.

While Germany is a global environmental pioneer in terms of renewable energy generation, including solar, wind and biomass, it is playing catch up in the area of green finance. A number of EU countries including France, the Netherlands, Belgium, Ireland and Poland have already launched sovereign green bonds. However, Germany has yet to do so, despite being the EU's benchmark issuer of debt.⁶ Our country has, of course, long been a leader in the battle against climate change. Indeed, it was one of the first countries to start reducing greenhouse gas emissions: between 1990 and 2009 our CO_2 emissions were cut by 23%,⁷ putting us some way ahead of many other leading economies. Then, in late 2019, we enshrined in law goals to further reduce carbon emissions by 2030, by 55% of 1990s levels, reflecting the commitment made by our government under the terms of the Paris Agreement.⁸

But we have been much slower in promoting finance as a way of driving environmental change. According to a study conducted by Novethic, a Parisbased sustainable finance research organisation,⁹ Germany's green funds market share stood at just 9% in 2017, compared with 33% for Switzerland and 20% for the UK.

Things are changing though. In the second half of 2020¹⁰ Germany is expected to launch its first government green bond. The multibillion euro issue will be part of the country's push to stimulate sustainable finance, acknowledging growing investor demand.

A European leader in green bonds

When it comes to green bond issuance by banks and corporates, Germany is rather more competitive. Total issuance reached €6.6 billion in 2018, ranking fourth globally after the US, China and France, according to the Climate Bonds Initiative.¹¹ Renewable energy dominated the use of proceeds with 60% in 2018, while low-carbon buildings accounted for 37%. Transportation accounted for just 2.6%.

Financial institutions are the most active issuers, accounting for 43% of total issuance in 2018. Mortgage banks such as Berlin Hyp and Deutsche Hypo were repeat issuers in that year, while development bank KfW, the country's largest issuer, accounted for 25%.

Beyond green bonds, \in 11.8 billion of environmental, social and governance (ESG)/sustainability and social bonds were issued in 2018, with the former the most popular.

Looking ahead, the Climate Bonds Initiative anticipates further growth in green bond issuance in Germany, encouraged by the anticipated government issuance.

Government support

To accelerate the development of the green finance sector, in mid-2019 the German government launched a Sustainable Finance Advisory Board, consisting of representatives from industry, finance and science.¹² The board has said it wants to come up with "concrete and practicable recommendations in shaping the necessary transformation in the real and financial economy".

In parallel, the country's financial regulator, the German Federal Financial Supervisory Authority (BaFin), is also taking action. It issued guidance notes last September urging financial institutions to embed ESG best practices into their core businesses, with suggestions as to how they should go about it. While not mandatory, the guidelines are a clear indication of the direction of travel. The impact is likely to be wide-ranging as the guidance notice applies to all entities supervised by BaFin (credit institutions, insurers, investment firms and pension funds) who will now be expected to carry out a strategic assessment of sustainability risks and to implement an appropriate strategy following this review.

EU regulations

EU-wide regulations are also having a significant impact in Germany. As part of a pledge to cut CO_2 emissions across Europe by 40% by 2030, the European Commission has outlined the need for €180 billion in additional annual investments under its commitments to the Paris Agreement.¹³

Among other initiatives, this ambition has led to the creation of the European "taxonomy" regulation which will come into force from 2021,¹⁴ requiring asset managers, insurers and pension funds to disclose environmental and social risks in their investments. A new taxonomy for green bonds is also under development within Europe, to define precisely what is required for a bond to be considered green.

Gathering momentum

Such initiatives at the European level are likely to further increase the momentum behind the growth of responsible investing in Germany.

Many of the country's traditional industries such as car manufacturing face a major challenge as they adapt to a low-carbon future. This transition will require substantial investment, which the public sector alone cannot fund. Consequently, as the government puts renewed emphasis on its ambitions for cutting CO_2 emissions, it is co-opting the finance sector for the first time.

Source:

- 6 Germany arrives late to green bond party, Financial Times, 19 December 2019.
- 7 Green growth policies: Germany World Bank, 10 April 2012.
- 8 Germany passes climate protection law to ensure
- 2030 goals, New York Times, 15 November 2019.
- 9 The European green funds market, Novethic, March 2017.
- 10 Germany to issue first 'green bond' in second half of 2020, Reuters, 19 December 2019.
- 11 Climate Bonds Initiative, Germany, Green finance state of the market. 2019 update.
- 12 Green and Sustainable Finance Cluster Germany, The Sustainable Finance Advisory Board of the German Federal Government Mission, ambition and objectives, October 2019.
- 13 Sustainable finance: EU reaches political agreement on a unified EU classification system, 18 December 2019.
- 14 Sustainable finance: EU reaches political agreement on a unified EU classification system, 18 December 2019.

04 Carbon Offsetting: New or Improved?



Olivia Watson Senior Analyst, Responsible Investment

Corporate commitments to carbon offsetting have increased in the past year, spurred in part by growing consumer awareness of climate change. Lyft, Zalando, Kering and others have made notable commitments to offsetting through buying carbon credits in the voluntary market. The most high-profile step may be that of easyJet, which committed to offset emissions from the fuel used in all its flights. Questions around the quality, additionality, and longevity of carbon offsets were one factor in the prior "boom and bust" in carbon markets in the last decade. Given the renewed focus on offsetting, these

and other questions may merit further attention, to ensure there is a different outcome this time around.

First, there is the long-standing question of whether offsets can lead to a credible reduction in emissions, with prices in the voluntary carbon market remaining low. For instance, easyJet is paying £25 million to offset fuel-based emissions for FY2020. Based on their FY2019 data, this equates to just over £3 per tonne. The low cost raises the question of how carbon sequestration through forestry and community initiatives can be monitored and verified at a large scale, and over a long period of time. EasyJet and others are working with schemes accredited by the Gold Standard or Verified Carbon Standard. While this provides some reassurance, to avoid potential reputational risks companies need to ensure that verification efforts are robust.

To maximise credibility in the eyes of stakeholders, offsetting commitments should ideally be combined with steps toward emissions reductions through other means. Zalando has set a commitment to establish a Science Based Target, aligned with the emissions goal set out under the Paris Agreement. For its part, easyJet has been eager to say that offsetting is only an interim measure, with future technologies under development around sustainable aviation fuel and hybrid and full electric aircraft. At the same time, however, absolute emissions are forecast to increase as the industry expands. While easyJet is already among the most efficient airlines on a CO2e/ passenger km basis, the credibility of corporate commitments to offsetting will be assessed in the context of how meaningful other emissions-reduction and R&D efforts are.

There is also the larger, thornier issue that voluntary carbon credits do not drive change in emissions patterns. The World Bank has calculated that a carbon price of between \$40-\$80/ tonne CO2e would be required in 2020, rising to between \$50-\$100/tonne CO2e in 2030, to stimulate the energy and technology switching that would be required to move the world on to a 2°C pathway. This vast gap between the prices currently available in voluntary markets (or credits in the EU ETS, for that matter) and World Bank forecasts underlines the extent to which price signals would need to change in order to lead to reductions in emissions. As it stands, in the absence of other regulations the costs voluntarily assumed by companies are unlikely to substantively add to prices - or to encourage shifts in consumption or corporate efforts to reduce emissions intensity.

This is not all to say that offsets are not a worthy effort – without fully functioning global carbon pricing schemes, individual companies cannot necessarily be expected to take unilateral action to internalise costs. Corporate offsetting efforts, where done well, may be part of a proactive approach to managing emissions and communicating effectively with stakeholders on a company's sustainability and climate strategy.

A further question is the extent to which land and forest-based offsets are scalable, and how the prices and capacity within the market may change over time. With growing commitments to "net zero" by countries, companies and other entities, land and forestbased sequestration efforts are set to be a significant part of the picture. High profile reduction plans, such as Shell's 2050 emissions ambition, rely heavily on afforestation. Likewise, the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), will rely on carbon credits for the aviation industry to achieve its 2050 emissions targets of stabilising emissions at their 2020 level. Its voluntary program launches in 2021 and will become mandatory in 2027. Cumulatively, these commitments will add up.

Recent research from Goldman Sachs suggested that of existing carbon sequestration mechanisms, forest-based options are vastly more economical, with two gigatonnes of sequestration potential available at low cost. However, in the context of global annual emissions, this is a limited amount. Start-ups such as Indigo Agriculture aim to change this, with an ambition to sequester CO₂ in soils on a vast scale, through improved agricultural practices. Should these efforts take off, this could change the picture. At present however, low cost forest-based sequestration is not likely to remain an option open to all major emitters, industries or countries in the mid- to long-term, requiring forwardthinking companies to plan accordingly.



05 Behavioural Finance: Inadequacies of Forecasting



Benjamin Kelly Senior Analyst, Responsible Investment

Question:

How many islands comprise the archipelago off the coast of Stockholm?

Typical answer:

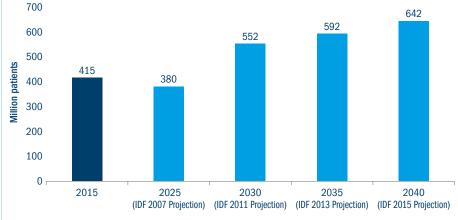
"I have never been to Stockholm or even Sweden for that matter, but I am 90% sure the answer is between three and 65." As individuals, we are prone to make decisions based on headlines without delving too deep into the substance of a story. Similarly, successful investors need to differentiate between what is noise and what are pertinent facts related to an event. This is easier said than done, and in behavioural finance terminology is expressed as the "overconfidence bias": the tendency to systematically overestimate the probability of an event to occur.

There are many exercises that can test an individual's level of overconfidence. One test frequently used, which is well documented in behavioural finance literature,¹⁵ is to ask investors 10 questions that are obscure enough that they are unlikely to know the answer. Examples include: how many litres of paint are required to paint the exterior of an A380 Airbus; how many islands comprise the archipelago off the coast of Stockholm; or what is the total distance travelled by London Underground trains in 2019? They are then asked to respond with a range within which they are 90% sure the true answer lies. Most individuals score no more than three out of 10. Given that the range is not limited, it is surprising the average is not closer to nine.

But then again, perhaps it isn't. We have a tendency to state very narrow intervals, even on subjects we know nothing about, so when it comes to subjects in which we believe we are knowledgeable the intervals become even narrower. Such unfounded overconfidence is concerning as it relates to how we view the world and make predictions.

In an era where the world is facing unprecedented environmental challenges ranging from climate change to food production, the need for robust forecasting has never been greater – however, we continue to state forecasts which are too optimistic.

For example, the prevalence of diabetes has been steadily increasing for decades. However, the International Diabetes Federation (IDF) has been significantly underestimating the growth of the disease for a number of years. In fact, its projection of 380 million diabetes cases globally by 2025 was overtaken in 2015 when the number rose to 415 million (Figure 4); and its 2035 projection for global healthcare expenditure of \$627 billion was also surpassed in 2015 when it hit \$637 billion. With industries and governments globally using the IDF's projections as benchmarks for planning purposes, these forecasts are influencing future healthcare spending. But how realistic are they? It is much easier for humans to extrapolate the future in a linear fashion, but if the pattern moves from linear to exponential, we struggle.





International Diabetes Federation/Berenburg estimates, 15 November 2018.

How can we correct for the bias?

In the context of the investment process and decision-making, behavioural finance has the most merit. Overconfident investors can be myopic: they often fail to see the bigger picture and once they have formed a view – whether at country level or at an individual security level – it is very difficult to change. Any further analysis they conduct is often simply to confirm their hypothesis. Over the long term, this approach provides sub-optimal investment returns.

One way to counter overconfidence of this nature is to actively seek out information that disproves an investment hypothesis. Much attention in investment research reports is attributed to appraising why something is a great investment opportunity. But one of the most important elements in any investment idea research report is: "What are the conditions in which this investment will not work?" It is remarkable how few investors ask this, given that it forces them to think carefully about the downside risks associated with their investment idea which, in turn, encourages them to explore material which runs counter to their hypothesis. Inevitably, questioning of this type results in a much more rounded appraisal of an investment idea; it should, ideally, be a systematic function of any investment process.

When focusing on views, we collate lots of information, synthesise our views and extrapolate what we currently see into the future. When convincing colleagues about a new investment idea it is natural to focus on the positive characteristics and what is unique about the opportunity. What we sometimes need, however, is a more objective appraisal that focuses more on how this opportunity relates to a representative reference class, ie how close is this opportunity to other investments and how have they performed.

In or out?

In the past few weeks, the coronavirus and its impact on markets has been a focal issue for investors, not only because of the potential for a global pandemic but also because of the uncertainty this brings to financial markets. Sovereign states are coming together to formulate a global response to combat the virus, and in the midst of the event it is easy to forecast that it could have a significant negative impact on global asset prices and economic growth. Given the amount of media attention it is also easy to be convinced that it is going to get much worse (and it might); however, this is not the first pandemic so perhaps it is worthwhile looking at historical market impacts.

This strategy is called the "outside view" and is a great method for challenging beliefs. Investors commonly rely on their own experience and information in making forecasts (the inside view) and don't place sufficient weight on past occurrences (the outside view). The latter considers a specific forecast in the context of a larger reference class – and this can be unnatural because individuals have to set aside their own past experiences as well as find and appeal to an appropriate reference class or base rate.

Figure 5: Fatalities by cause

Virus	Date of outbreak	Related no. of Deaths	Market impact
Swine Flu	June 2009	575,400	Little/no (forecast of up to 50 million deaths
Ebola	March 2014	11,325	None (mostly contained to Africa)
MERS	September 2012	858	None
SARS	February 2003	774	Coincided with Iraq war, oil price spike & end of equity bear market
Bird Flu	Peak deaths in 2005	455	Minimal/other factors at work

Source: Longview Economics, World Health Organisation.

Using the outside view for the coronavirus, the result is likely to be negligible in terms of market impact, even if the forecast number of deaths significantly diverges from the actual number of deaths. In 2005, the World Health Organisation forecast that 45 million might die from bird flu – the total fatalities were in fact just 455.

Much remains unknown about how the coronavirus will evolve in the coming weeks, and this is not to suggest the outside view will prevail in this instance; however, coupling the inside view with the outside view can challenge the inside view, which can mitigate overconfidence and produce better forecasts.

Process over panic

The key to eliminating most behavioural biases in investment decision making is to stick with a process: in times of heightened market uncertainty the successful investors are those who stay true to their process and are not distracted by high profile market events. The coronavirus is in the spotlight right now, but as we contemplate what else lies in store for investors over the coming 12 months, such as the US election or US-China trade discussions, we must also reflect on what is not necessarily front and centre of investors' minds at present but should be.

When events start to dominate headlines, as coronavirus is doing today, we must remember to stick to a process and to constantly ask the question: "Where could I be wrong?" It is a great filter for removing overconfidence.

Question:

How many islands comprise the archipelago off the coast of Stockholm?

Correct answer:

Approximately 32,000.

Source:

15 See Russo and Schoemaker (1989) Decision Traps: Ten barriers to brilliant decision making and how to overcome them, Simon&Schuster.



STEWARDSHIP IN ACTION

Columbia Threadneedle Investments views an integrated, joined-up approach to stewardship as an integral part of its responsible approach to investment.

We vote actively at company meetings, applying our principles on a pragmatic basis. We view this as one of the most effective ways of signalling approval (or otherwise) of a company's governance, management, board and strategy. We classify a dissenting vote as being where a vote is cast against (or where we abstain/withhold from voting) a management-tabled proposal, or where we support a shareholder-tabled proposal not endorsed by management.

While analysing meeting agendas and making voting decisions, we use a range of research sources and consider various ESG issues, including companies' risk management practices and evidence of any controversies.

Our final vote decisions take account of, but are not determinatively informed by, research issued by proxy advisory organisations such as ISS. IVIS and Glass Lewis as well as MSCI ESG Research. Proxy voting is effected via ISS. Although we subscribe to proxy advisors' research, votes are determined under our own custom voting policy which is regularly updated. The RI team assesses the application of the policy and makes final voting decisions in collaboration with the firm's portfolio managers and analysts. Votes are cast identically across all mandates for which we have voting authority.

All our voting decisions are available for inspection on our website seven days after each company meeting. We engaged with numerous issuers throughout the quarter. In prioritising our engagement work, we focus our efforts on the more material or contentious issues and the issuers in which we have large holdings – based on either monetary value or the percentage of outstanding shares.

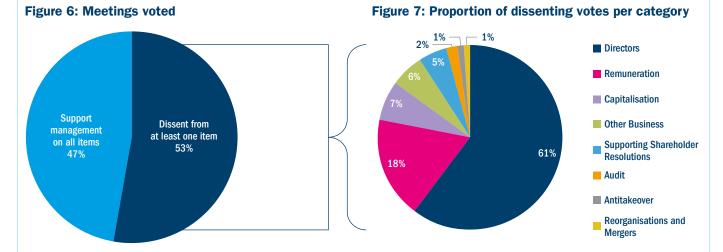
There are many companies with which we have ongoing engagements, as well as a number that we speak to on a more ad hoc basis, as concerns or issues arise.

We actively participate in several investor networks, which complement our approach to engagement. Along with other investors, we raise market and issuer-specific environmental, social and governance issues, share insights and best practice.

We do not make use of third-party engagement services.

06 Annual Voting Summary[®]

During 2019, we voted on behalf of our clients at 5,709 meetings, 4,805 of which were annual meetings, 670 special, 170 combined annual/special, 37 court meetings, 16 proxy contests, seven written contests and four bond holder meetings. We dissented from management recommendations on at least one item at 3,027 meetings. The charts below detail our voting activity throughout the year.



Most votes were cast in the second quarter, the period when global companies tend to hold their annual general meetings.

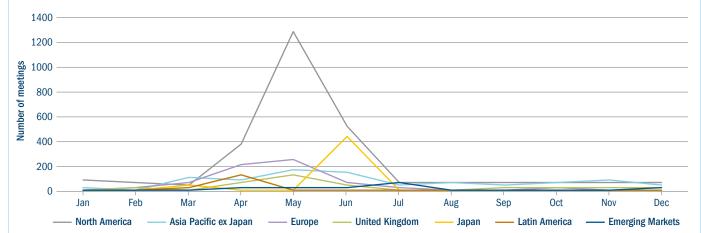


Figure 8: Number of meetings voted per region per month

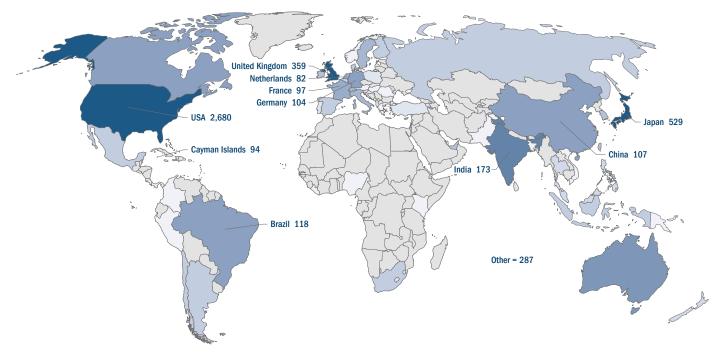


Figure 9: Heat map of meeting volume per country

We voted in 67 separate markets in 2019. Most meetings were voted in the US (2,680), followed by Japan (529), the UK (359), India (173) and Australia (130).

Regionally, Japan saw the highest proportion of meetings with at least one dissenting vote (72%), followed by Asia Pacific ex Japan (62%) and United Kingdom (58%).



Figure 10: Meetings voted per region

We instructed votes against management's recommendation for 6,111 separate resolutions.

In 2019, we introduced new voting guidelines for Japan. These new voting guidelines were intended to accelerate the speed in which Japanese companies were incorporating good corporate governance practices. Japanese corporate governance is unique, this is due to companies adopting three different types of board structures. In developing our voting stance, we needed to be cognisant of these board structures and the nuances which come along with them. The main areas that we focused on were independent representation and gender diversity. Looking deeper at

gender diversity in Japan, we have seen good progress in recent years with 38% of Japanese boards now having at least one female director, this is up from 31% in 2018, and up from 9% in 2012.17 Combined with our new voting stance, we also engage with Japanese companies regularly to promote and encourage good corporate governance practices.

Another new voting stance that we introduced in 2019 was looking at the tenure of a company's auditors. We prefer that companies rotate their auditors at a maximum of every 20 years. This is to ensure that the external auditors remain as an independent party.

1.1%

1.7%

2.4%

0.3%

On remuneration, we do not support items where we have concerns between the pay-performance linkage. We typically measure total pay relative to peers and/or a relevant market index and look at performance over the longer term and over a chief executive's tenure. Quantum, structure and stringency of targets also play an important role in our assessment of executive pay.

Source:

5.4%

_

_

3.6%

1.4%

0.1%

1.7%

1.6%

_

0.7%

16 Columbia Threadneedle/company reports, 31 December 2019. 17 ISS - 2019 Japan Proxy Season Review.

0.1%

13.6%

0.6%

0.5%

0.3%

United

Kingdom

57.2%

31.3%

2.9%

5.0%

1.7%

0.2%

1.7%

0.2%

Asia Pacific Emerging Furone I atin North ex Japan Markets ex UK Japan America America Directors 59.4% 43.0% 41.4% 92.4% 58.7% 60.2% 24.6% Remuneration 10.5% 13.9% 3.4% 8.7% 23.3% Other Business 5.8% 28.5% 11.4% 0.2% 22.1% 1.5% 16.9% 17.2%

3.6%

1.8%

_

8.5%

0.6%

Figure 11: Proportion of dissenting votes per category and region

2.2%

0.1%

3.3%

1.8%

22

Capitalisation

Antitakeover

Audit

Supporting Shareholder Resolutions

Reorganisations and Mergers

07 Voting Q4

Between October and December 2019, we voted at 577 meetings across 39 global markets.

Of the 577 meetings, 349 were annual general meetings, 206 special, 12 combined annual/special, five court, four proxy contests and one written contest. We cast at least one dissenting vote at 269 (47%).

250 200 196 200 Number of meetings voted 95 150 109 100 70 101 43 50 27 9 91 30 18 ¹¹-7 30 17 1/ 0 г North Asia United Europe Emerging Latin Japan America Pacific Kingdom ex-UK Markets America ex-Japan Dissent from at least one item Support management on all items

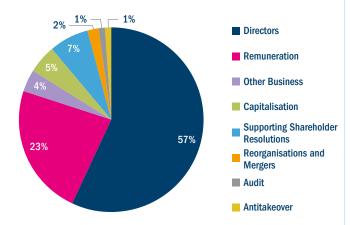
Figure 12: Meetings voted by region

Source: Columbia Threadneedle Investments, ISS ProxyExchange, 31 December 2019.

We voted in 39 separate markets in the fourth quarter. Most meetings were voted in the US (198), Australia (101), the UK (63) and China (24).

We did not support 4,028 individual voting items throughout the quarter, the majority relating to directors' elections and executive pay. A frequent reason for voting against directors in the United Kingdom and Europe was due to low levels of board independence, or non-independent presence on key committees. Generally, we have seen levels of independence improving but we continue to ensure companies are striving for the appropriate independence levels. We prefer boards to at least be 50% independent and for all key committees, such as the remuneration, nomination and audit committees to be fully independent.

Figure 13: Proportion of dissenting votes per category



Source: Columbia Threadneedle Investments, ISS ProxyExchange, 31 December 2019.

08 Engagement Highlights

Between October and December 2019, we engaged with the 56 issuers listed below, some on multiple occasions.

Environmental, social and governance discussions

Symrise, Royal Dutch Shell, Unilever, GlaxoSmithKline, Ubisoft Entertainment, Guardant Health, Burberry Group, Charles River Labortories, Vinci, Volkswagen, Novartis, SAP, Total, Red Electrica, Air Liquide, Akzo Nobel, Schneider Electric, Vale, VZ Holding

Specific environmental focus

Symrise, easyjet, Vestas Wind System, Casella

Specific social focus

Pernod Ricard, Extended Stay America, Royal Bank of Scotland Group, Triodos Bank

Specific governance focus

Oxford Instruments, Unilever, Vectura Group, Moncler, Ted Baker, Prudential, Rentokill, Whitbread, Dalata Hotel Group, CVS Hotel Group, Derwent London, InterContinental Hotel Group, Marks and Spencer Group, Royal Dutch Shell, Stagecoach Group, Collaborative, JD Wetherspoon, Koninklijke Philips, Standard Chartered, CRH, Smith & Nephew, RSA Insurance, Lam Research, The Go-Ahead Group, Wm Morrison Supermarkets, Marel

Case studies

The following are case studies of ESG-related engagement led by members of the RI team.

Symrise, Germany, Speciality Chemicals *Water management*

- Symrise is a diversified chemicals company, producing fragrances, flavourings and seasonings. It has over 9,000 employees in 100 global locations.
- We engaged with Symrise in December. After conducting enhanced ESG analysis, we had questions about management of water risks. Symrise has water intensive operations in areas of high-water scarcity. Since 2014, Symrise's volume of water withdrawals increased by 141% and intensity by 93%.
- Through the engagement, we found out that the risks are less acute for food flavourings and fragrance. So not all facilities are covered by a water reduction target.
- Using external data, verified internally, the company has identified its four highest-risk sites in Mexico, Egypt, China and India where a 2025 aim has been set to improve water efficiency. The company sees an integrated approach to sustainability as a competitive advantage. This is evidenced by including sustainability metrics in pre-project/M&A due diligence and have cost of capital implications.
- Good governance structures are in place, CEO has overall ESG responsibility, chief sustainability officers implement and chair a sustainability board that comprises divisional heads and the sustainability team.
- We are now comfortable that the company is aware of and managing its water risks well, but we would welcome a firm-wide reduction target. We will continue to monitor the company and engage as appropriate.

Burberry, United Kingdom, Apparel & Luxury Goods *Sustainability*

- In November, we met with Burberry to discuss a range of sustainability matters and the disclosures that we would like to see alongside those.
- There was clear intent to challenge themselves on sustainability, driven internally and by investors. Interestingly, Burberry do not see much demand from customers, though the company believe positive sustainable attributes are a given and there is a lot of downside reputational risk.
- Range of ongoing work: Research & Development partnerships with academia, more sustainable sourcing (eg, cotton, cashmere and leather procurement), innovative materials (eg, capsule collection with recycled nylon), circularity (eg, active promotion of repairs, luxury resellers), workforce development (eg, attempting to benchmark global wages).
- We encouraged the company to provide more granular details and financial metrics of their 2022 target, "...100% of products have more than one positive attribute".
- Carbon reduction targets are stretching. Its emissions are already industry-leading, but it has committed to reducing Scope 1 and 2 emissions by 95% by 2022 and Scope 3 by 30% by 2030.

Pernod Ricard, France, Beverages

Labour rights, culture

- The RI team contacted the company following negative press reports about culture.
- The press reports are driven by the 280 voluntary redundancies being made in France. We were comfortable with the company's response where it cited its whistleblowing procedures including an external, independent, anonymous hotline that is reported up to a board-level integrity committee.
- Though the company has built and relaunched its sustainability strategy in the last 18 months, responsible drinking has been part of the firm's culture for a long time. There are many policies in place, and education programmes, that apply to all employees.
- There was recognition that the company underperforms peers in terms of health and safety. A forklift truck operator was killed in 2017/18 that prompted an action plan and a programme of improvement that is being led by the production director.

Guardant Health, USA, Biotech

Labour rights, culture

- We met company management on their management of material ESG risks: cyber security, employee management and succession planning.
- In the IPO documents, the company disclosed a phishing attack that affected 1,100 patients. Since then, there has been an overhaul of the approach to cyber security. Many best practice features: all-employee education, external firms on retention, white hat simulated attacks, formal breach response strategy, senior management and board level review. Recognition of risk severity in terms of monetary loss and/or reputational damage.
- The company view attracting, retaining and developing employees as a challenge, given the competitive sector in which they operate. There is continued monitoring and the topic was a focus of recent management offsite. They see the company's mission as a positive differentiator in Silicon Valley.
- Management's focus this year is on building a robust succession plan for key individuals.

Palo Alto Networks, USA, Technology

Governance, executive compensation

- We met with technology company Palo Alto Networks ahead of a contentious AGM to better assess governance and executive compensation structures and offer our feedback to the newly elevated lead independent director.
- PANW is looking to begin board reform by realigning board committee membership following the retirement of two directors and the recent addition of a new director who brings skills/experiences to help oversee the company's shift to a cloud-based business model. We provided feedback on realignment and the company's classified board structure, and further encouraged the adoption of a majority vote standard for the election of directors.
- Pay has been subject of criticism in prior years, with executives receiving large grants of equity incentives and performance-vesting metrics not fully disclosed and understood by investors. We encouraged more frequent, smaller grants of incentives linked to metrics connected to the strategic business shift, and that are measured over three-year periods relative to peer performance.
- While we cast dissenting votes related to pay at the AGM, we committed to continued, constructive dialogue with the board and management to help drive value through appropriate reform.

Marathon Petroleum Company, USA, Energy

Governance

- We conducted a series of meetings with management, the lead independent director, and other shareholders over several months, to provide insight around the company's governance, strategic positioning and mix of assets. The meetings grew from our collaboration with our fundamental analysts and concerns around valuation.
- The company had also experienced on-again, off-again discussions with an activist investor, which led to beneficial board-level change two years prior.
- We engaged with the lead independent director to encourage the board and management to be receptive to investor concerns and feedback, including specifically around governance practices, disclosure of operating performance or strategic intentions. We also shared perspective gained from our work collaborating with other investors on the company's opportunities to unlock shareholder value.
- Shortly after our discussions, the company announced a series of important and value-enhancing actions that were well-received by the market, ranging from undertaking a strategic review of company assets to the spin out of a retail division to a planned and orderly CEO succession in 2020.

To find out more visit COLUMBIATHREADNEEDLE.COM

EMEA.Stewardship@columbiathreadneedle.com US.Stewardship@columbiathreadneedle.com RI.Thematic@columbiathreadneedle.com



Important Information:

For internal use by Professional and/or Qualified Investors only (not to be used with or passed on to retail clients). This document is intended for informational purposes only and should not be considered representative of any particular investment. This should not be considered an offer or solicitation to buy or sell any securities or other financial instruments, or to provide investment advice or services.

Investing involves risk including the risk of loss of principal. Your capital is at risk. Market risk may affect a single issuer, sector of the economy, industry or the market as a whole. The value of investments is not guaranteed, and therefore an investor may not get back the amount invested. International investing involves certain risks and volatility due to potential political, economic or currency fluctuations and different financial and accounting standards.

The views expressed are as of the date given, may change as market or other conditions change and may differ from views expressed by other Columbia Threadneedle Investments (Columbia Threadneedle) associates or affiliates. Actual investments or investment decisions made by Columbia Threadneedle and its affiliates, whether for its own account or on behalf of clients, may not necessarily reflect the views expressed. This information is not intended to provide investment advice and does not take into consideration individual investor circumstances. Investment decisions should always be made based on an investor's specific financial needs, objectives, goals, time horizon and risk tolerance. Asset classes described may not be suitable for all investors. **Past performance does not guarantee future results, and no forecast should be considered a guarantee either**.

Information and opinions provided by third parties have been obtained from sources believed to be reliable, but accuracy and completeness cannot be guaranteed.

In Australia: Issued by Threadneedle Investments Singapore (Pte.) Limited ["TIS"], ARBN 600 027 414. TIS is exempt from the requirement to hold an Australian financial services licence under the Corporations Act and relies on Class Order 03/1102 in marketing and providing financial services to Australian wholesale clients as defined in Section 761G of the Corporations Act 2001. TIS is regulated in Singapore (Registration number: 201101559W) by the Monetary Authority of Singapore under the Securities and Futures Act (Chapter 289), which differ from Australian laws.

In Singapore: Issued by Threadneedle Investments Singapore (Pte.) Limited, 3 Killiney Road, #07-07, Winsland House 1, Singapore 239519, which is regulated in Singapore by the Monetary Authority of Singapore under the Securities and Futures Act (Chapter 289). Registration number: 201101559W. This document has not been reviewed by the Monetary Authority of Singapore.

In Hong Kong: Issued by Threadneedle Portfolio Services Hong Kong Limited 天利投資管理香港有限公司. Unit 3004, Two Exchange Square, 8 Connaught Place, Hong Kong, which is licensed by the Securities and Futures Commission ("SFC") to conduct Type 1 regulated activities (CE:AQA779). Registered in Hong Kong under the Companies Ordinance (Chapter 622), No. 1173058.

In the USA: Columbia Management Investment Advisers, LLC (CMIA) is an investment adviser registered with the U.S. Securities and Exchange Commission.

In EMEA: Issued by Threadneedle Asset Management Limited. Registered in England and Wales, Registered No. 573204, Cannon Place, 78 Cannon Street, London EC4N 6AG, United Kingdom. Authorised and regulated in the UK by the Financial Conduct Authority.

This document is distributed by Columbia Threadneedle Investments (ME) Limited, which is regulated by the Dubai Financial Services Authority (DFSA).

For Distributors: This document is intended to provide distributors' with information about Group products and services and is not for further distribution.

For Institutional Clients: The information in this document is not intended as financial advice and is only intended for persons with appropriate investment knowledge and who meet the regulatory criteria to be classified as a Professional Client or Market Counterparties and no other Person should act upon it.

Columbia Threadneedle Investments is the global brand name of the Columbia and Threadneedle group of companies.

columbiathreadneedle.com