OPSG

# OCCUPATIONAL PENSIONS STAKEHOLDER GROUP

## Advice on Sustainable investments for IORPs: risk, return and inclusion properties.

PUBLIC
OPSG -22/13
17 May 2022

European Insurance and
Occupational Pensions Authority

# CONTENTS

# EXECUTIVE SUMMARY

Sustainable finance and ESG investing are strategic areas of intervention for EIOPA, who fosters the mitigation of ESG risks by insurers and pension funds and welcomes the consistency between their asset allocation and the ESG preferences of policyholders and pension scheme members.

Given the key role of the EU and EIOPA in the transition towards ESG investing, the OPSG decided to express its opinion on the contribution of ESG investments to return and risk, based on the past and looking at the future development of the sector. This is crucial for IORPs, which are among the institutional investors involved in ESG investing.

In this note we indeed review the state of the art in ESG investing, namely how ESG factors enter into the investments process of institutional investors, which include IORPs, insurance companies and asset managers, as well as the outcome of such investment process.

There are motives for ESG investments to provide higher returns than non-ESG-tilted ones, as well as reasons for the opposite relation to hold, especially for stocks. We recognize that, consistently with these motives, past performance of ESG investments, both stocks and bonds, is mixed. For bonds, the relationship between credit and ESG rating is crucial in determining the spread.

The market is undergoing profound changes, though. Investor preferences, including underwriters' customers and pension scheme members' ones, are more and more sensitive to ESG factors. Also the inclusion in the financial market of younger investors, such as the Millennials, who appreciate ESG policies, through intermediaries like investment funds, insurance companies and pension funds, is pushing the demand for ESG assets. This higher appreciation for ESG assets on the part of households and their intermediaries, together with regulation, is likely to produce significant changes and to make capital less costly for ESG-compliant firms. The final outcome on extra returns for institutional investors is not clear-cut, but risks should be reduced, which is per se a welcome perspective for IORPs, that the OPSG hopes for.

Consistently with the EU spirit, inclusion of new and change in the attitude of extant investors is likely to improve the contribution of finance to sustainable and inclusive growth. The OPSG welcomes the contribution to growth and inclusion per se.

The OPSG recognizes that the increasing attitude towards ESG investing is a phenomenon that may go beyond major disruptions such as war episodes. We do not take a stand on the impact of war in Eastern Europe in this paper.

# 1. ESG FACTORS AND ESG INVESTING

## 1.1. ESG Factors

### 1.1.1. What are the ESG factors?

E (Environmental), S (Social) and G (Governance) are the three dimensions of so-called sustainable investments. They are aspects of financial investments. As is known, the E is comprehensive of impacts on climate change, climate protection, natural resources protection, biodiversity, recycling, pollution and waste management. The S includes attention to and impacts on human rights protection, inclusion, social and economic fairness, labour rights. The G includes among others attention to corruption prevention, tax fairness, disclosure and data protection measures. They are considered as relevant factors in the portfolio allocation and management process.

The objective of including ESG factors in the asset allocation process is that of introducing attention for the environment, together with ethical values and considerations. The idea, at least for institutional investors and financial intermediaries, is consistent with the modern, broad corporate view of pursuing stakeholders interest, instead of maintaining the classical shareholder perspective. Stakeholders include employees, customers and the society as a whole.

### 1.1.2. Which risks do they impact on?

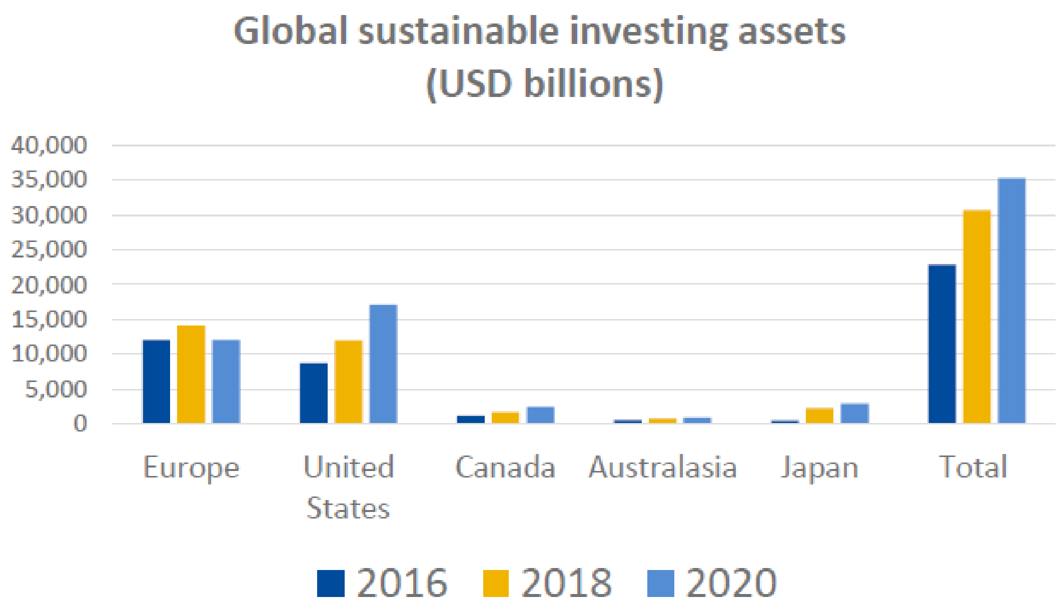
ESG investments directly affect the SUSTAINABILITY RISK of the portfolio, namely the risk of negative realizations of the above factors. They should reduce negative risks.

At the same time, they affect MARKET, INTEREST RATE, CREDIT AND OPERATIONAL, as well as litigation or strategic RISK of an investment portfolio. Market Risk, as is known, is the risk of decreases in prices in long assets, and is common to any portfolio of assets, while Interest Rate Risk arises for bond portfolios. ESG assets include at least green and social bonds, but can include also certain stocks as well as other bonds or real assets. Credit Risk is the risk of default of the issuer or underlying asset for derivatives. The impact on these risks of investing ESG is not zero. Operational Risk includes the risk of reputational or business continuity damages, and is clearly connected to litigation risk. All of them contribute to strategic risk. We will see below that firms complying with ESG principles, or “doing good”, are expected to mitigate reputational risk and to increase trust.

## 1.2. ESG INVESTORS AND INVESTING

ESG Investing has been growing a lot over the last years, both for households and institutional investors. Worldwide, according to the Global Sustainable Investment Alliance data (2020), the increase is both in absolute values and in percentage of assets under management. As of 2020, $35,300 billion were ESG and SRI (Socially Responsible) investments, where SRI include investments with a specific purpose and selection based on ethical criteria, following the corresponding signature. The increase of this type of assets under management has been 55% over the period 2016-20, 15% over the period 2018-20. By so doing, they went from 27.9% of total Assets under Management (AUM) in 2016 to 35.9% in 2020.

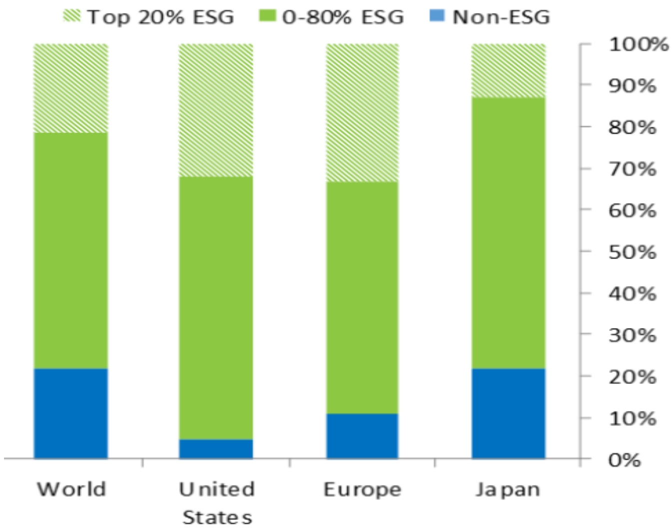
The picture below shows that the increase has been steady worldwide and for the US, Canada, Australasia, Japan, while it has been less pronounced in Europe, mainly because the EU taxonomy led to exclude some assets which were previously considered ESG. Also, the data from the Global Sustainable Investment Alliance (2020) go beyond ESG, and include SRI assets, which are not examined elsewhere in this report and are slightly different. Without correcting for assets which were considered ESG in 2016 and 2018 and not in 2020, Europe, too, would have presented an increase in 2020.




(Source: own elaboration from Global Sustainable Investment Alliance data (2020); EU results are affected by the fact that EU taxonomy restricted eligible assets)

The market capitalisation of all companies which have an ESG score from Refinitiv represents 78% of the total market capitalisation in the world, 95% in the US, 89% in the EU, and 78% in Japan. Looking into the details, stocks that rank in the first 20% according to their ESG properties are also 20% of the market capitalization, stocks that rank in the lower 80% of the ESG classification are about 60%, while non-ESG stocks represent the rest, namely about 20% of stock market capitalization. In the US and Europe the percentage of best ESG performers in the market capitalization is greater, while Japan lags far behind. The following picture illustrates the situation.

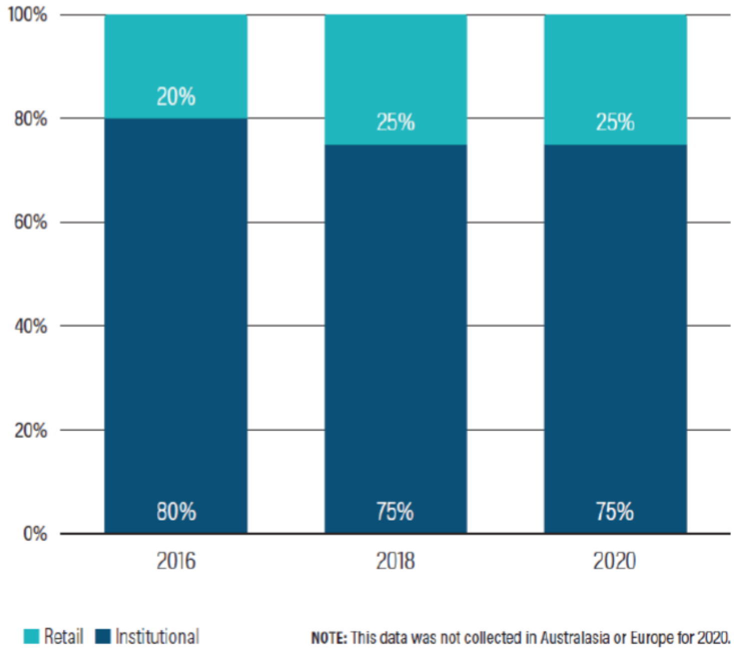
PERCENTAGE CAPITALIZATION OF THE CORPORATIONS WHICH RANK IN THE FIRST 20% THE ESG SCALE (PALE GREEN), IN TH BOTTOM 80% (DARK GREEN) AND NON-ESG CORPORATIONS (BLUE),




Source: Refinitiv, OECD (2020) calculations)

Where does this growth come from? Worldwide – and excluding Europe - it comes both from retail and institutional investors, with the share of the former going from 20 to 25%, as the following picture illustrates

FIGURE 9 **Global shares of institutional and retail sustainable investing assets 2016-2020**



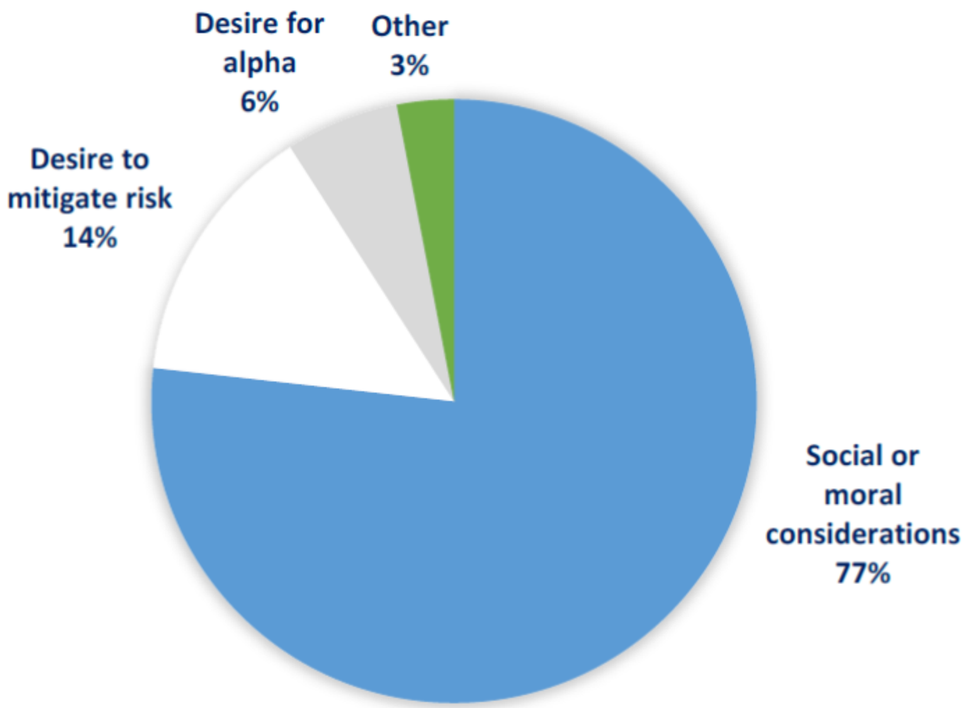

**NOTE:** This data was not collected in Australasia or Europe for 2020.

(Source: Global Sustainable Investment Alliance (2020)

What are the drivers of such growth?

For households, recent industry surveys testify a change in savings preferences, namely a greater, spontaneous attention to the ESG factors, as part of a general attitude and greater attention to ESG factors in everyday life. For instance, social or moral considerations justify 77% of the investments in ESG assets, according to a Merrill Lynch survey, presented in OECD (2020), whose results are reported below. We will come back to this attitude in Chapter 3.

DRIVERS OF ESG INVESTING FOR HOUSEHOLDS, from a Merrill Lynch survey (OECD, 2020)

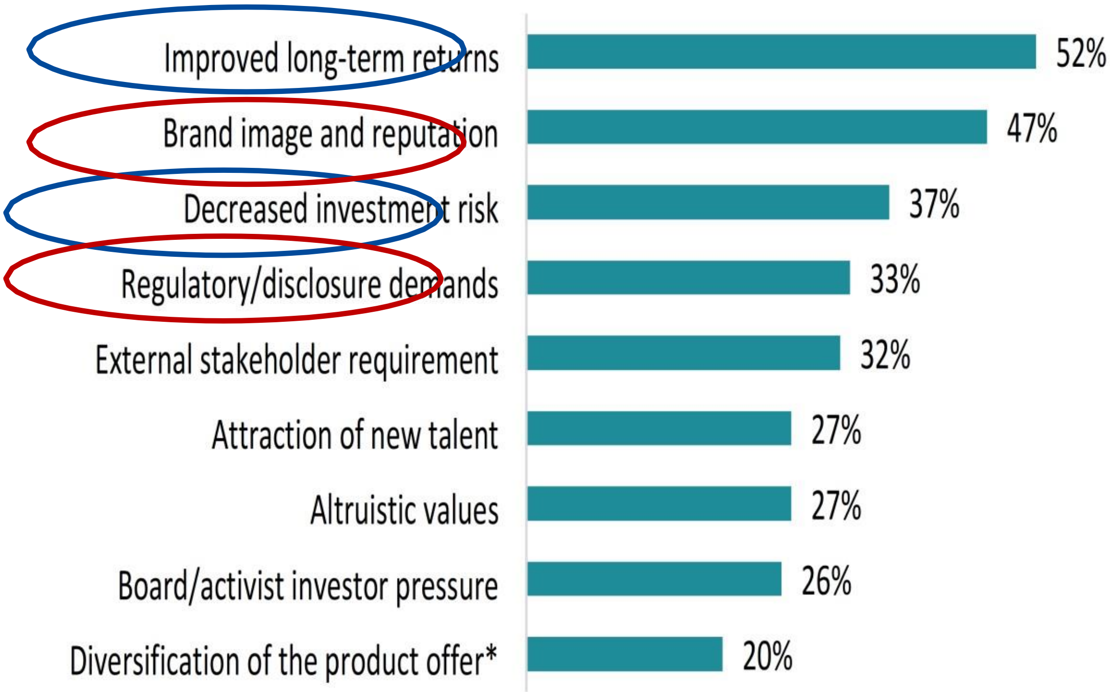



Source: Merrill Lynch Wealth Management

For institutional investors, the search for long-run return, which could be expected to be greater for ESG assets (although there exists no hard scientific proof for this conjecture so far), the perception that investing ESG improves the reputation and the brand image of an investor, the expected decline in risk of the AUM, and the new regulatory requirements, are the main drivers, according to a recent survey by BNP Paribas (2019), presented in OECD (2020), that we report in the next page. In Chapter 3 we will argue that these motives are rapidly evolving

Regulation has certainly played a fundamental role, at least in the EU. In the next section we are going to give an overview of it.

DRIVERS OF ESG INVESTING FOR INSTITUTIONAL INVESTORS, from a BNP Paribas survey (OECD, 2020)




(Source:BNP Paribas)

### 1.2.1 REGULATORY AND ISSUANCE INTERVENTIONS FOR ESG INVESTING IN THE EU

In order to foster ESG investing, a number of regulatory interventions have taken place.

In 2017 the European Commission, following the Kyoto protocol, the Maastricht Treaty, the UN agenda, the Paris Agreement on climate change, appointed a High-Level Expert Group (HLEG) to prepare for reforms. In 2018, the European Commission adopted its Sustainable Finance Action Plan, based on the recommendations of the HLEG. In 2020 it adopted the taxonomy of E factors, in 2021 the Disclosure regulation in products (SFDR), as well as the need for disclosure in financial advice. It also proposed the amendment of the existing non-financial reporting requirements (NFRD), through the adoption of a new Corporate Sustainability Reporting Directive (CSRD), which extends its scope to all large companies and all companies listed on regulated markets (with the exception of listed micro-enterprises)..

On February 28, 2022, the Platform on Sustainable Finance published the report on social taxonomy, i.e. the S taxonomy advice.

On March 10, 2022, the SFDR entered into force. The SFDR is likely to harmonize the disclosure on ESG assets and, especially through articles 8 and 9, to make their comprehension easier to the final investors.

On the issuance side, the Commission declared that it will try to raise up to 30% of the NextGenerationEU funds (€250 billion) by issuing NextGenerationEU green bonds, whose revenues are to be used to finance green policies. The issuance started in October 2021, with a first tranche of €12 billion, followed by a second tranche of €2.5 billion in January this year.

Given the key role of the EU and EIOPA in the transition towards ESG investing, the OPSG decided to express its opinion on the contribution of ESG investments to return and risk, based on the past and looking at the future development of the sector.

## 1.3. ESG SELECTION PROCESS AND RATINGS

The investment process for institutional investors faced to ESG investments, be them stocks or bonds or their derivatives, can be divided into the following steps:

- Non-financial analysis, i.e. the contribution to one or more ESG type (E, S or G)
- Scoring/Rating, namely identification of how good the proposed asset is in the ESG rating scale
- Screening, i.e. use of the rating (to exclude, include assets)
- Integration into the Investment Process
- Reporting

We are going to comment on these aspects

### 1.3.1. RATINGS

ESG ratings, similarly to credit ratings, are assigned by private issuers or agencies. They are complex to determine, because they refer to three different and delicate-to-measure qualities, but are at the core of ESG investing.

At present, there is a lot of heterogeneity in ratings issued by different agencies. Berg et al. (2021) analyse the discrepancy among the ratings of the 6 most important agencies. The ESG assets they study are the stocks of 924 firms, between 2014 and 2017. Dispersion ranges from 90 to 32%. Berg et al. decompose the dispersion of ratings in 3 components:

- Aim, or which factors and subfactors are included
- Measurement, i.e. how factors are measured
- Weight, i.e. how much they affect the final score

These components explain respectively 44%, 53% and 3% of the variation.

Because of the lack of standards for ESG ratings and the consequent lack of verification of the scores, every player (ESG rating entity) has developed a proprietary methodology on which there is little transparency and which has led to information asymmetry between all parties in the industry. Lately few players have step forward publishing their methodology because they expect European regulators to come up with solid proposals soon.

It comes as no surprise that, given such a high dispersion among ESG ratings, also the resulting performance of ESG investments, which is discussed below, is so diverse. The OPSG would welcome any approaches to harmonize ESG-ratings, but only if they are based on generally accepted scientific and objective criteria.  This is important in the physical, E dimension, as well as in the S and G ones.

In addition, most ESG rating agencies are owned by Anglo-Saxon investors. Experience has shown that Anglo Saxons could have a different view on the 3 items (E, S and G) compared with Europeans. Tomorrow, there could also be large Chinese ESG agencies with a different perspective than Europeans. As Europe has been on the front lead for ESG, European authorities could consider a way to promote their views on ESG and possibly the emergence of an European agency.

All in all, the OPSG believes that the elimination of inconsistencies and inaccuracies or discrepancies in ESG ratings is fundamental for a correct performance comparison, but also for the stability and credibility of the industry. More than that, it is fundamental for consumer protection and avoidance of any fiduciary duty violation.

### 1.3.2. SCREENING VS INTEGRATION

ESG criteria can be used to include or exclude an asset from a portfolio (screening) or to determine its weight without including or excluding it (integration).

Screening of assets based on their ESG rating comes in different forms:

- Exclusion: assets or corporations are excluded because their ESG rating is too low. This happens because Exclusion is mainly equivalent to ‘avoiding to invest in sectors’ which are not in line with basic sustainability parameters (oil and gas, pornography, tobacco, etc.).
- Positive or best-in-class. Some assets or corporations are included in the portfolio because their rating is particularly high, at least in a particular industry.

- Norm-based, i.e. inclusion or exclusion following regulatory criteria, or potential breaches of ILO treaty, UNGC, OECD recommendations.

Often screening is substituted by the integration of ESG criteria in the investment process, together with risk and return. The rating becomes another dimension of the investment, instead of being a criterion to include or exclude assets.

In Europe, exclusion strategies are the most popular among institutional investors, while in the US the opposite happens.

# 2. RISK AND RETURN OF ESG INVESTING

The issue of whether we could expect higher or lower returns from stocks with a particularly high ESG rating than from the rest of the portfolio can be analysed looking at the theoretical motivations for such an outcome, and then checking with the past empirical evidence. This is the object of this chapter.

## 2.1 PRINCIPLES

The existing literature does not agree on the foreseeable effects of ESG considerations in the investment process and particularly on the question whether ESG investments should deserve an extra-return.

### 2.1.1 NO EXTRA RETURN

Part of the literature thinks that sin stocks, such as tobacco or liquor producers' stocks, are the ones who deserve an extra return, for given risk, because they are against the social norm. Households and institutional investors should require an extra-return (premium) to hold them. (Hong and Kacperczyk, 2009)

### 2.1.2 EXTRA RETURN

Another part of the literature thinks instead that, as investors move towards ESG investments, their prices increase and returns exceed the ones of non-ESG (or brown) assets.

However, this is a temporary, short-run phenomenon, due to the transition to green investing, because the sudden increase in demand with stable supply leads to increased asset prices and abnormal, positive returns. It is not a permanent one. In the long run there is no need for such kind of extra return, because supply will adjust to demand, which will stabilize.

At the opposite, in the long run ESG investments should have lower returns than the average, because investors like holding them even independently (or on top) of their financial return, and because they hedge climate and environmental risk (Pastor et al, 2021). So, overall, even if green assets have lower monetary returns, investors are happy with them because they give them non-monetary benefits and satisfaction in helping the climate transition or reaching societal goals.

Other experts think that ESG assets deserve a premium both in the long and short run, in the same vein as stocks of firms attentive to the welfare and satisfaction of employees do. It has indeed been proven that the latter deserved an extra return of 2.1% per annum over the period 1984-2009. The firms classified as « best places to work » were the ones with extra returns (Edmans, 2011).

Some more others think that the uncertainty on ESG ratings – that we discussed above - is the motivation for an additional return or positive premium. Because the real ESG quality of an asset is concealed by a lot of uncertainty, investors require a premium to hold the corresponding asset. ESG rating uncertainty works in this case like any other idiosyncratic return, which deserves an extra return so as to convince investors to buy the corresponding asset.

## 2.2 EMPIRICAL EVIDENCE FOR STOCKS

Faced to these theoretical views, there has been a huge effort to determine whether IN THE PAST ESG investments provided higher or lower returns than non-ESG or lower-ESG ones. This evidence is mixed because the existing research papers use

- Different ESG criteria (some E only, some E and S)
- Different ratings even for the same criteria
- Different countries
- Different timespans in the data
- Different types of investors (household, institutions)
- (sometimes and erroneously) SRI investing as a proxy for ESG investing, while the two are different

Also, ESG investing was marginal till some years ago, and the corresponding data is not robust to changes in definition and taxonomy.

In a meta-study based on the 2015-2020 evidence, Whelan et al. (2021) found that

- Research covering ESG and performance often suffers from inconsistent terminology, including the confusion between SRI and ESG
- It also suffers from the dismissal of materiality
- And the lack of the standardization of ESG criteria
- Overall, out of the 1000 papers analysed, 59% showed for ESG tilted portfolios similar or better performance relative to conventional portfolios
- only 14% found negative performance

- and the non-negative correlation between ESG rating and return is easier to find on long-run than on short-run returns.
- ESG integration seems to perform better than negative screening.

Another very well known (meta-)study has been done by Friede, Busch and Bassen (2015). Here, roughly 2.200 primary studies have been taken into account and have been analysed. The authors showed that 90% of these primary studies found a non-negative correlation between financial performance and ESG-integration into processes, decisions etc.. A majority of these studies even stipulated a positive correlation. But in these results analyses regarding single companies and investment portfolios are mixed up. So, in a separate second step the authors of this meta-study analysed the studies (out of the aforementioned sample of primary studies) only with regard to the correlation between ESG-integration and the performance of investment portfolios – and got a somehow astonishing result: only 16% found a positive correlation whereas the large majority (70%) found a neutral correlation or mixed results.

In any case, most of the literature finds – in the best case - only a correlation between having a high ESG rating and return. Correlation is not causality.

In the next chapter we argue that the attitude of investors towards ESG is changing rapidly, so that this past evidence has to be read with caution. It is interesting, though, in order to permit us in the next chapter to envisage changes.

The empirical evidence on which there is quite unanimous consensus is that

- Social norms affect stock prices and returns: investors prefer to hold stocks of firms which follow ethical standards and are "good", instead of holding stocks of firms whose ethical values are doubtful. Evidence from corporate financing decisions and the performance of sin stocks outside the US suggest that. Sin stocks are neglected by norm-constrained investors, both per se and because they fear reputation and litigation risk, especially if they are institutional investors
- There is a positive effect on returns of G factors. Gompers et al., 2003, studied a sample of 1500 large firms over the 1990s and proved that buying stocks with high G and selling those with low G. would have earned abnormal returns of 8.5 percent per year. Firms with stronger shareholder rights have higher shareholder value, higher profits, higher sales growth
- There is a positive effect on returns of S factors (Edmans, 2011), because more happy workers seem to increase their productivity
- G factors have been proven on data to provide higher returns for stockholders (Gompers 2003)

- Institutional ESG investors are also active investors, and therefore are expected to contribute to a better performance and higher dividends. A study recently published by the OECD (2021), indeed mentions that that the two main strategies adopted by the large pension funds and public pension funds, in 2020, were exclusion screening and active ownership
- ESG firms have lower downside risk or simply lower overall risk, and therefore their returns, even if on average, become higher than the average once risk-adjusted. It is indeed argued in Hoepner et al. (2018) that ESG attention diminishes the risk of extreme losses, as measured for instance by the Value at Risk, and does so more when there is engagement, in the form of shareholders' activism.

## 2.3 EMPIRICAL EVIDENCE FOR BONDS

The study of returns on ESG bonds is less developed than the stocks one. As a general rule, for institutional investors, the constraints in the construction of a bond portfolio in terms of Sovereign vs corporate issuers, duration, credit rating and liquidity, both for Sovereign and for corporate bonds, are such that there is less room than in the construction of a stock portfolio for ESG considerations. On top of that

- The volume of non-Sovereign bonds with clear ESG features is limited with respect to the total
- Maybe some of the ESG information is already contained in the credit rating, since rating agencies usually do look at sustainability issues when producing ratings.

The last point, and in general the relationship between credit and ESG rating, is important. It has been observed that – having eliminated the credit rating effect – lower bond spreads are linked to better ESG rating, especially over the recent past. This means that the latter do contain additional information with respect to credit ratings.

Together with the lower spreads just mentioned, the evidence is the following:

- In some studies, green bonds return less than the average, probably because there has been a higher willingness to finance green firms. There is a negative association between E&S and costs of financing for a firm, called green premium. However, the investors' pro-environmental preferences have a low impact on bond prices and the green premium has been 2 bps on average, over the period 2013-17, both in the US and in the EU (Zerbib, 2019).
- The main determinants of this premium have been proven to be the rating and the issuer type.
- Consistently with that, during the Great Recession, firms attentive to sustainability have been able to raise funds at better conditions.

- Some studies noticed that there has been extra negative return on ESG bonds, because of increasing prices, exactly as for stocks, and for the same, temporary reasons (Pastor et al.,2021)
- There is also evidence of limited downside risk, as for stocks

# 3. INVESTORS' INCLUSION AND ESG RETURN/RISK PERSPECTIVES

In this chapter the OPSG argues that the recent inclusion of new generations of investors, such as the Millennials, the general changed attitude of other generations, such as the X or baby-boomers, as well as the ensuing changed attitude of institutional investors, and their regulatory compliance, are likely to change the performance and role of ESG assets.

Consistently with the EU spirit, inclusion of new and change in the attitude of extant investors is likely to improve the contribution of finance to sustainable and inclusive growth.

All the remarks in this chapter look at the horizon after the current war in Eastern Europe. The OPSG is aware of the fact that this war can make the transition to green investments more rapid as well as slower, and possibly distort the increase in demand and the considerations reported here, at least temporarily.

## 3.1 RETAIL INVESTORS

There is no doubt that some generations of investors pay more attention than others to ESG characteristics. The more they enter into that part of the life cycle when their savings are high, i.e. in the mid part, the higher the demand for ESG stocks and bonds is expected to be. According to a recent survey by Morgan Stanley, 84% of millennials considers ESG central, and 17% of them want the ESG criteria to be quality ones.

The flows to mutual fund increase when important ESG-information, such as Morningstar sustainability ratings, is released, according to a recent analysis of Hartzmark and Sussman (2019)

There is also strong evidence that the introduction of ESG principles in investing supports a greater number of individuals to invest rather than stay away from financial markets (see also the picture and survey of Section 1.2). It also supports an increased exposure to equity – ESG investors mandate a higher share of equity than non-ESG ones – which favours an increased participation in stock markets. Participation has always been surprisingly and unfortunately low (see Brière and Ramelli, 2021).

The participation of new generations and the changed attitude of the incumbent ones can also go together with an increasing focus on the S and G pillar, as health systems, education, workplace safety, equal rights, migration phenomena come to the forefront.

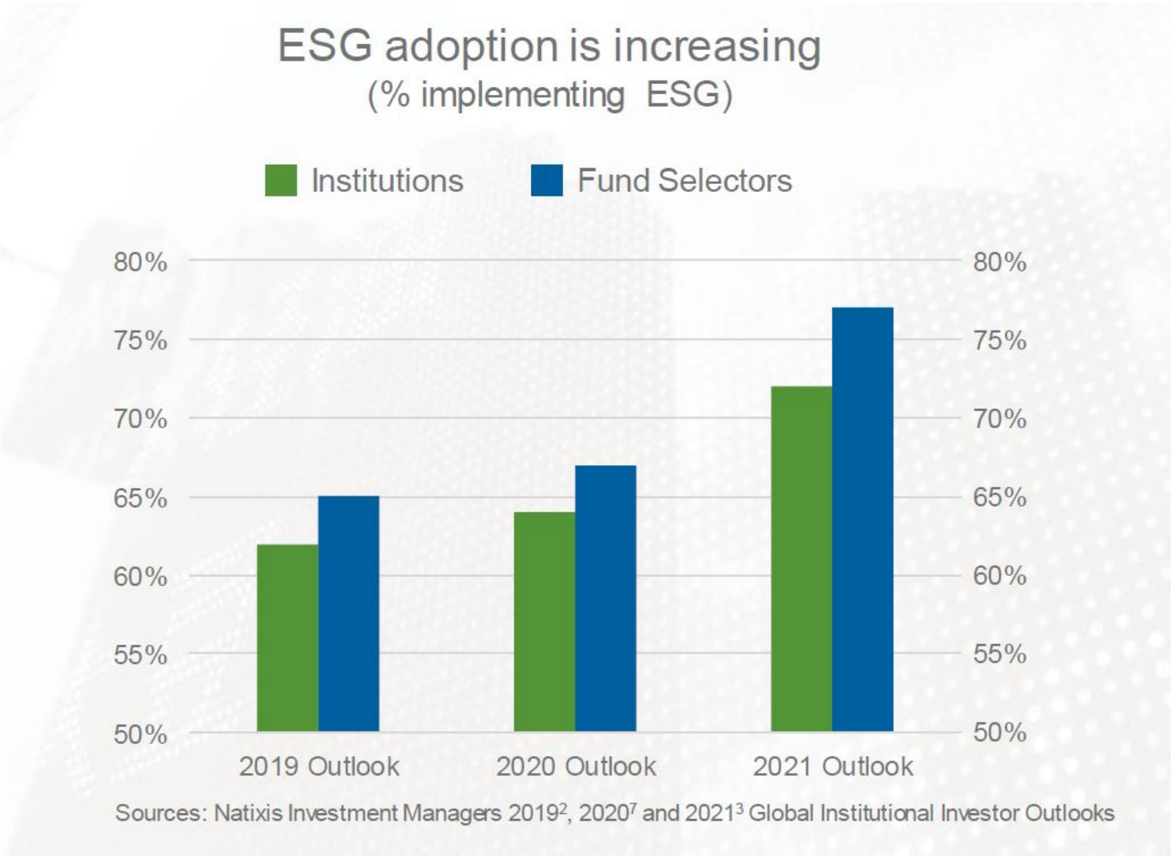
## 3.2 INSTITUTIONAL INVESTORS

Investment by institutional investors in ESG is driven by the regulation and the preferences of their members, beneficiaries or customers (if they are – say – pension funds, insurance companies, investment funds). This is another driver of increased demand.

Also the motives for investing are changing: here below you find a recent survey by Natixis, which gives a more nuanced and value-based picture of the reasons why institutional investors invest in ESG assets, with respect to previous surveys such as the BNP-OECD one we reported in Section 1.2, where the focus was more on long-returns.


More and more often, institutional investors become active stakeholders, when it comes to enforce ESG policies, and therefore enhance monitoring and strategic vision in the enforcement of ESG policies.

Inclusion of new types of investors, either directly or through intermediaries, and higher attention of institutional investors, even when they are not intermediaries, have spurred demand and are likely to push it further in the future. Below we report one of the 2021 forecasts (for the time being, there is no ex post count)




This increased demand, both for retail and institutional investors – together with active ownership, which is, alongside with exclusionary screening, one of the main ESG strategies used by Large Pension Funds and Public Pension Reserve Funds in 2020, as presented in a study conducted by OECD (2021) - is welcome and good from the societal point of view. However, some are afraid of its impact on risk and returns of ESG assets.

## 3.1. RETURN PERSPECTIVES

As long as prices of ESG assets continue to increase, higher returns on this type of assets than on general indices are to be expected. In the long run, however, if prices reach a plateau, there is no theoretical compelling reason for ESG assets to continue giving extra returns. According to this part of the theory (see Pastor et al., 2021) the increase in demand could positively affect simply the short run returns, without affecting the long run ones.

If there is a reduction in the uncertainty which now affects ESG ratings, also thanks to regulatory interventions, such as the extension of the EU taxonomy to S and G, we would expect to see a reduction in the extra premium observed in the past and due to ESG uncertainty. A reduction in the uncertainty of the true ESG quality of an asset, thanks to a more “objective” ESG rating, means less idiosyncratic risk for investors and therefore deserves a smaller expected return (see above, section 2.1.2)

According to others, instead, a more sustained demand for ESG assets will have a permanent effect on the financing of firms that are respectful of ESG principles and, as such, will permits “do well by doing good”, namely to have high return while pursuing the preservation of the planet and of good ethical values. ESG could matter because

- It may attract customers and increase sales
- It may improve the willingness of employees to participate into the firm growth
- It is linked to the attention to long-run growth (even though it costs in the short run)
- It may decrease sustainability risk, reputation and litigation risk

For the E part, in particular, the argument is as follows: in the long run, also as a result of climate-friendly legislations on the industrial sector, returns on green stocks can outperform the rest. Already in 2016 Whelan and Fink (2016) argued in the Harvard Business review that embedding sustainability efforts has led to positive impacts on the performance of businesses. Now that we expect regulation to relief E-compliant firms, this is even more true.

Similar arguments can apply to S and G factors. For the S part, we have the evidence already mentioned above, that testifies higher returns for “best places to work”, or the S factor (see Edmans, 2011).

For the G factor, the arguments in Gompers et al. are expected to hold also in the future (See above ad Gompers at el. 2003). Indeed, there is almost no doubt that a better governance should lead to better results, better dividends and therefore returns.

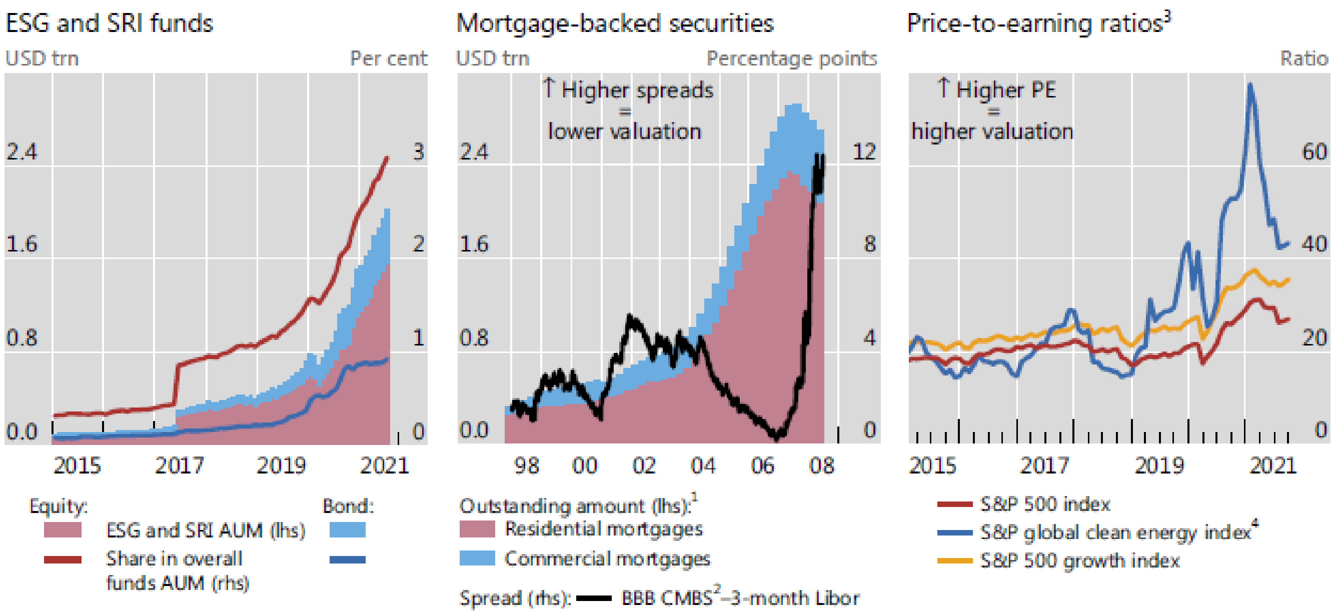
Overall, the final outcome on extra returns for institutional investors is not clear-cut. **The OPSG takes a neutral stand on return perspectives on stocks, also because further catastrophic events, such as energy crises due to war episodes, or steps back/forward due to energy shortages, together with regulatory interventions, are not neutral.**

For green bonds, some market participants envisage for the future not only a continuation of the green premium explained above and observed in the past, but a positive correlation between the effort of firms to reduce carbon emission and their own credit rating. S&P for instance has estimated the impact of potential future carbon-tax scenarios on companies’ credit score. The difference between high and low carbon taxes regimes, and firms reacting rapidly or slowly to it is huge, with the best credit score in scenarios of strong regulation against carbon and for early adopters (Baldassarri, 2021).

## 3.2 RISK PERSPECTIVES

Faced to the huge growth increase in demand for ESG assets, the BIS (20/09/21) has warned market players, because of the fear of a sort of bubble.  The situation the BIS comments on is represented in the following picture:

Sustainable finance's growth prompts parallels with past market developments    Graph A1




ESG = environmental, social and governance; SRI = socially responsible investing.

[1] Private label. [2] ICE Bank of America 0–10 year BBB US fixed rate commercial mortgage-backed securities index. [3] Monthly averages of daily values. [4] Includes firms that produce energy from solar, wind, hydro and other renewable sources, as well as those that supply clean technology. The top 10 constituents account for approximately 50% of total weight; no single stock's weight is higher than 8%.

Sources: Bloomberg; Datastream; EPFR; ICE BofA indices; authors' calculations.

The picture on the left shows the strong increase of ESG and SRI (Socially responsible investments) funds from 2015 to 2021. The increase is represented in USD trillions on the left axis and as a shaded area, as a percentage of AUM on the right axis and as a line. The picture shows that it holds both for bonds (blue) and stocks (pink).

The figure at the center shows, on the same dollar scale, the increase in Mortgage Backed Securities (MBS) over the period 1998 to 2008, distinguished between commercial (blue) and residential. The nominal amount has more or less the same order of magnitude of ESG AUM in the left plot.

From the comparison of the two pictures the BIS is tempted to conclude that we must pay attention to another bubble, similar to the MBS one.

The picture on the right compares the value of the S&P general index, in red, the S&P global clean energy index in blue, and the S&P subindex of growth stocks in orange. The comparison is over the period 2015 to 2021 and points to the fact that the energy index has been more volatile but has reached higher peaks. The Authors read the decline in the energy index in 2021 as a sign of possible overheating of the sector, even though they recognize that it does not represent ESG assets as a whole.

The OPSG recalls that, behind the increase in the ESG AUM, differently from other booms, there is

- a hopefully permanent change of attitudes of generations such as the X and baby boomers,
- the entrance into the financial markets of natively green generations, such as the Millennials,
- and, last but not least, a hopefully permanent attitude of regulators towards a greener planet, and therefore a permanently higher attention to ESG factors.

The OPSG also stresses that, already in the past, ESG products have been demonstrated to have lower downside risk. The increase in the size of the market should reduce liquidity risk. For bonds, the expectations are of a mitigating interaction with credit risk, based on the forecast.

Overall, and again in the impossibility of assessing the impact of war episodes, we are confident in the risk-mitigating action of ESG investments, especially for IORPs. However, often IORPs invest passively into large stock markets (by replicating a broad equity index) and they do such kinds of investments on a risk-budgeted basis, often using derivatives to ensure that the risk-budgets are met. From this perspective it is a clear disadvantage, that currently there are no liquid exchange traded derivatives on sustainability stock indices available – something which such IORPs would desperately need for doing risk-budgeted passive equity investments. Supervisory authorities could and should play a role in supporting the creation of such instruments within the financial industry.

## 3.2. INCLUSION PER SE

The OPSG believes that inclusion of new generations into the savings process, in particular in financing ESG-compliant firms through stocks and bonds, is a remarkable objective per se and an aid to these firms.

The inclusion in financial markets seems to receive a great help from the natural interest in investing in ESG assets. The OPSG believes that this is per se an important phenomenon. Particularly important for IORPs, if it raises the attitude of young generations to save for their late age.

The OPSG believes that also the fact that these savings are towards firms respectful of ESG qualities is important, and deserves full support from regulatory Authorities around the globe.

# 4. REFERENCES


- Baldassarri, G., Climate Change: Energy Transition Risks and Opportunities for European Public Companies' Creditworthiness, 2020. S&P Global Market Intelligence.
- Berg, F., Koelbel, J. F. and R. Rigobon, 2021, Aggregate Confusion: The Divergence of ESG Ratings. Working Paper.
- BIS, International banking and financial market developments , 2021, BIS Quarterly Review, September 2021
- Boffo, R. and R. Patalano, ESG Investing: Practices, Progress and Challenges, 2020, OECD Paris
- Brière M. and S. Ramelli, Responsible Investing and Stock Allocation, SSRN Working Paper N°3853256, 2021
- Edmans, A., Does the stock market fully value intangibles? Employee satisfaction and equity prices, *Journal of Financial Economics*, 2011, 101, pp. 621–640
- Friede, G., Busch, T., Bassen, A. 2015, ESG and financial performance: aggregated evidence from more than 2000 empirical studies. Journal of Sustainable Finance & Investment 5 (4): 210-233.
- Global Sustainable Investment Alliance, Global Sustainable Investment Review 2020, www.gsi-alliance.org
- Gompers, P.A., Ishii, J. L. and A. Metrick, 2003, Corporate Governance and Equity Prices, *Quarterly Journal of Economics,* 118 (1), pp. 107-155. Available at SSRN: https://ssrn.com/abstract=278920 or http://dx.doi.org/10.2139/ssrn.278920
- Hartzmark, S., Sussman, A., 2019, Do investors value sustainability? A natural experiment examining ranking and fund flows, Journal of Finance 74, 2789-2837.
- Hoepner, Andreas G. F. and Oikonomou, Ioannis and Sautner, Zacharias and Starks, Laura T. and Zhou, Xiaoyan, ESG Shareholder Engagement and Downside Risk (December 27, 2021). AFA 2018 paper, European Corporate Governance Institute – Finance Working Paper No. 671/2020, Available at SSRN: https://ssrn.com/abstract=2874252 or http://dx.doi.org/10.2139/ssrn.2874252
- Hong, H. and M. Kacperczyk, 2009, The price of sin: The effects of social norms on markets, *Journal of Financial Economics*, 93 (1), pp. 15-36
- OECD, Survey of Large Pension Funds, https://www.oecd.org/daf/fin/private-pensions/Survey-of-Large-Pension-Funds-2021.pdf
- Pastor, L., Stambaugh, R. and L. Taylor, Sustainable investing in equilibrium, wp, 2020
- Whelan, T., Atz, U., and C. Clark, 2021, ESG and Financial Performance. Centre for Sustainable Business, NYU-Stern.
- Whelan. T., and C. Fink, 2016, The Comprehensive Business Case For Sustainability, *Harvard Business Review*, 21
- Zerbib, D.O., 2019, The effect of pro-environmental preferences on bond prices: Evidence from green bonds, *Journal of Banking & Finance*, 98 (January), pp. 39-60