



The ESG trend from a systematic investor's perspective

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- From January 2022, asset and wealth managers in Europe will likely be required to disclose information on their products ESG profile
- Despite of various concerns about data and rating quality, investors have already started to funnel money into strategies claiming ESG compliance
- We think that in the short-term investors can profit from this push towards greater ESG compliance by buying into the theme
- Longer-term however, investors should be prepared that highly sought after, relatively defensive ESG leaders will deliver lower returns. We therefore suggest combining the theme with other style factors such as Value and Momentum

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aking into consideration Environmental, Social and Governance (ESG) aspects in investing has become increasingly mainstream over the past years. With the European Parliament adopting a new framework to facilitate sustainable investment in June 2020 it is clear that no asset and wealth manager can ignore the trend anymore. The enthusiasm however is not uncontroversial as lobbying groups and regulators fear greenwashing while asset and wealth managers bemoan loss of investment opportunities and an additional compliance burden. We highlight why we generally welcome the new movement towards sustainable investing despite its fallacies and elaborate on the role of ESG in factor investing.

1 The pressure to invest sustainably

In 2015, I attended a consumer staples conference in Boston and happened to sit next to Unilever's investor relations officer during dinner. We talked about the meetings she had hosted with various investors throughout the day and eventually touched the topic of ESG. Unilever already highlighted the topic a lot in presentations back then but she noticed a pronounced divide among investors about the topic. While many European investors were curious about the initiative, one American fund manager apparently came in to the meeting saying: "I am interested into capital allocation and your ESG initiatives ... ok that was a joke ... let's

talk about capital allocation". There is still a major divide between Europe and the US (see for instance *Diverging US EU ESG regulations could impact fund returns* on the topic) but there is no doubt that at least on this side of the Atlantic it has really been picking up with investors funnelling money into a new breed of funds and ETF claiming ESG compliance (see for instance Rajna Gibson, 2019). This will exacerbate once the



"Yes, the planet got destroyed, but for a beautiful moment in time we created a lot of value for shareholders."

new EU disclosure rules will finally become applicable. Based on our own experience, end investors, even if not aware of the topic in the first place, are very likely to favor products that incorporate ESG criteria if informed. It is hence likely that the new disclosure criteria will make it increasingly difficult to sell products that don't explicitly do so. (Note that initially the regulation was supposed to kick-in on the 10th of March 2021 but the deadline has since been postponed as confirmed by

a letter concerning the Application of Regulation (EU) 2019/2088 on the sustainability-related disclosures in the financial services sector to the European Supervisory Authorities. Markets now expect the new regulation to be applied starting in January 2022 (EC delays introduction of level 2 SFDR rules) which means that from this date onwards asset managers will, among other things, be obliged to disclose at a product level information about "the manner in which sustainability risks are integrated into its investment decisions and the likely impacts of sustainability risks on the returns of the financial product" as well as "information as to whether, and if so how, the particular financial product considers principal adverse impacts on sustainability factors" (see for instance: ESG Disclosures for Asset Managers Under the EU Sustainable Finance Disclosure Regulation and Taxonomy Regulation).

2 The teething problems in ESG investing proliferation

The great pressure to adopt sustainability criteria in the investment process naturally raises doubts about the seriousness of such attempts. ETF providers have already launched a myriad of 'ESG screened' products. In the ESG compliant version of its famous EuroStoxx50 for instance Deutsche Boerse replaced EssilorLuxottica, Safran, Prosus, AnheuserBusch, Adyen, Airbus and Volkswagen with Ferrari, Teleperformance, Heineken, Legrand, Merck, Infineon and Worldline. The index provider is thereby following the simple exclusion approach, precluding certain companies based on criteria, either rooted in the firm's business model (controversial activities such as production of military hardware) or in execution (weak governance scores for instance in case of a corporation like Volkswagen).

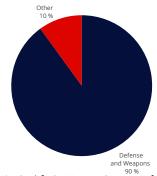


Figure 1: Smith & Wesson Sources of Revenues Source: MSCI, Amadeus Quantamental

Obviously, such exclusions are itself controversial. Certain activities like alcohol, tobacco, hotel business and even firearms are not considered equally problematic by all group of investors. Governance or environmental scores are even harder to assign and subject to disagreements even among providers of quantita-

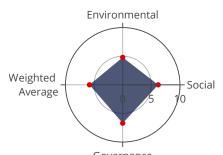
tive ESG ratings such as (MSCI and Sustainalytics) as unlike for instance a credit rating they rely on nonstandardised information subject to interpretation by the rating provider. This can also result in biases caused by varying degrees of professionalism, completeness and honesty in company's ESG related reporting. Unlike an index provider, an active asset manager has the freedom to approach the topic in a much more differentiated way. Instead of just avoiding certain companies in the first place, this could for instance mean to do rather the opposite and lobby for change through shareholders resolutions or in management meetings. First time impact investors therefore face numerous questions when adapting their investment process (in Table 1 at the end of this article, we are therefore also providing an overview of the approaches of varying strictness that investors are following):

- Shall certain controversial business activities be generally excluded and if yes, what kind of thresholds as a percentage of revenues should be applied? Many corporations have partial exposure to controversial activities. This can include software companies that act as suppliers for the defence industry as well as telecommunications corporations or hotel chains like Marriott that derive tiny percentages of revenue from tobacco products. Advanced ESG data packages include respective breakdowns that allow investors to tolerate minimal revenue exposure to such activities.
- Shall corporations that score poorly be directly excluded from portfolios or is there an interest to actively push for change. While passive or quantitative investors who hold hundreds of positions have little capacity to monitor corporation's improvements on an ongoing basis or become active through shareholder resolutions, investors with more concentrated portfolios may decide to go the extra mile and address issues rather than vote with their feet.



Figure 2: Things can also get worse Source: MSCI, Amadeus Quantamental

Shall corporations be judged based on their absolute score or is a best in class approach preferable.
 For some companies, scoring well on ESG regardless of how it is measured is just much easier than for others. A software company's carbon footprint is likely to be lower than that of an airline or an oil producer. Nevertheless as of today, most people



Governance
Figure 3: Royal Dutch Absolute ESG Scores - We still need oil though

Source: MSCI, Amadeus Quantamental

would rather not do without the products of the latter. As such the comparison across industries can often be unfair and result in sector biases. Instead of heavily overweighting just a few industries, investors can therefore reward businesses that score well compared to their peers.



Governance

Figure 4: Royal Dutch Relative ESG Scores - Best in class approach allows fair comparisons

Source: MSCI, Amadeus Quantamental

- Ultimately it is desirable that businesses that are a burden to the world cease to exist. In the short to medium term however, change will mostly come from transformation of existing businesses. Investors may therefore put a focus on improvements rather than absolute scores and reward businesses that got better with time rather than those that started out scoring well in the first place. Obviously, ongoing scrutiny is important in this context as well as companies may attempt to circumvent the rules by simulating action (e.g. accompanying the closure of some already exhausted coal mines with a big PR campaign).
- To what degree should the strategy rely on data from ESG rating providers and what role should and can own research and judgement play. One example in this context is the ESG rating of US government bonds. Given the size and importance of this asset class as well as the influence of US policymakers, ESG providers shy away from rating Treasuries poorly despite secretly admitting that a strict application of their methodology would result in low scores given the US role in arms trade, climate change and the existence of capital punishment in the country. The French civil-service

pension fund and a group of other investment funds therefore decided to blacklist the asset. (see for instance: *ESG Hardliners Blacklist \$16 Trillion U.S. Treasuries Market*)



Figure 5: Exposure to most countries can be problematic given high corruption levels around the globe. Interested in this data? Visit: https://rpubs.com/FSl/corruption_index_markdown

Source: Transparency International Corruption Perception Index, Amadeus Quantamental

• We have also noticed a substantial large cap bias in ESG ratings provided by MSCI. As outlined in Figure 6, less than 1% of corporations with an Enterprise Value lower \$1bn. but more than 7% of companies with an Enterprise Value greater than \$50bn. currently receive the best possible rating of AAA. The distribution looks similar for absolute pillar scores as well as for the best in class quartile scores (see Figure 8 and 9 in the appendix). Reading through reports about smaller corporations at random we often stumble over sentences such as "lags peers in adopting notable programs across ESG parameters". It is not surprising that smaller

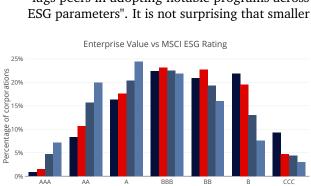


Figure 6: MSCI ESG Ratings by size group Source: MSCI, Amadeus Quantamental

■ Group 2 Medium (1bn. < EV < 10bn.)
■ Group 4 Mega (50bn. < EV)

Group 1 Small (EV < 1bn.)

Group 3 Large (10bn. < EV < 50bn.)

and more resource constraint corporations find it more challenging to hire teams dedicated to writing nicely formatted reports for MSCI and Sustainalytics or costly consultants organizing workshops. Small and medium-sized businesses with generally ethical business models and often strong community ties may also not see the need to boast about their ESG performance. On the other hand we see the risk that large corporations for which the additional compliance burden is relatively minor

find ways to easily tick the boxes of rating agencies without actual change in behavior. In our eyes, before requiring asset managers to provide ESG related disclosures, regulators should work on the standardization of ESG reporting with clear and comprehensive guidelines and thereby reduce the dependency on a handful of large rating agencies.

3 Why we should not become cynical about it

Despite of the wide range of serious weaknesses in ESG investing, from non-standardized reporting and rating to greenwashing, we consider the increased focus on the topic beneficial. First and foremost, the pressure to launch ESG compliant products puts a spotlight on businesses' activities that used to attract little attention. As large rating providers collect more and more non-reporting data on ESG related activities, monitored by a growing number of investment professionals, it becomes more likely that company's dirty secrets don't only get discovered but start to matter for their share price.

A factory collapse in Bangladesh (#dhakagarment-factory) or miserable working conditions in the UK (#boohoo) may not have mattered much and been forgotten quickly in the past. Nowadays more and more investors are equipped with tools that keep track of such red flags and also monitor company's subsequent reaction and progress. Of course as the case of boohoo (a darling of ESG oriented investors due to its high MSCI ESG rating before questions about its labor conditions were raised) clearly shows this process often does not work satisfactorily well. However it can't be stressed often enough: Only if a system has been set in place, it can be improved over time.

4 What does it imply for performance expectations

Only few investors enjoy the luxury of being in the market solely for charitable purpose, the majority, including ourselves, eventually needs to achieve an attractive risk adjusted rate of return. This brings us to the question what the inclusion of ESG criteria implies for our risk/return matrix. This question will become even more important once the new EU framework is applied. End investors may embrace the possibility to easily select ESG compliant funds but this enthusiasm often rests on the assumption that the decision comes at zero cost.

4.1 Sin stocks vs ESG leaders

There are arguments why ESG compliant investing should eventually deliver lower absolute returns. Most importantly, the risk based explanation of security returns suggests so. There is (setting exceptions discovered by the behavioral finance literature aside) a broad consensus that investors are generally risk averse and therefore require higher returns for riskier investments. Also, ceteris paribus, firms that score poorly on ESG criteria should be considered riskier than firms that achieve high ratings. A poor environmental impact score increases the risk of becoming the target of public scrutiny including boycotts, adverse regulations and litigation. Stricter regulatory requirements can result in high costs for retrofitting of factories or product developments and even turn the whole business unprofitable.

Examples are numerous and reach from the struggle of combustion engine producers to comply with new pollution norms to cruise ship operators and cement producers. More or less the same applies to poor Social scores. Companies relying on cheap labor for instance are at risk of huge increases in production costs once higher minimum wages are put in place or workers go on strikes. At the same time, poor governance scores increase the risk of accounting scandals or execution failures.

Last but not least an investment in a stock with high ESG related risks also needs to compensate (professional) investors for the reputation risks they face by holding it. All these points should eventually translate into a risk premium for such stocks (and bonds) and hence into lower valuation and higher expected returns. This rational has been the basis for a handful of 'sin' funds and ETFs which attempt to deliver higher returns by doing exactly the opposite of ESG oriented investors. (see for instance: 'Sin stock' ETFs strive to make good on returns)

4.2 Higher cost of capital as a transmission channel

The risk based return premium is also in-line with the stated rational of the push towards (positive) impact investing by regulators and investors. While some activists may push for change directly at shareholder meetings and through shareholder resolutions the bulk of ESG oriented investors uses a different channel. By dumping the stocks of corporations that score poorly and refraining from subscribing to their bond issuances, the investors attempt to eventually push up the firms' cost of capital.

While a higher interest burden and a lower share price is painful by itself, it also affects companies by increasing the hurdle rate for project return on investments. Previously profitable projects (the drilling of a new oil well, the construction of another garment factory...) can thus become unattractive because of the corporation's poor ESG rating. This can be a competitive disadvantage if peers with better ratings take on those

projects instead (advantaging best in class players) but in the best case it directly benefits the environment and humanity by preventing projects that cause huge externalities (human exploitation, pollution, carbon emissions) in the first place.

4.3 Is ESG another style factor?

Aside from the risk based approach to the expected return vector of ESG leaders and laggards, there is the factor based explanation. As Blitz and Fabozzi, 2017 point out, typical 'sin' companies such as tobacco and arms producers tend to be restricted in how they can grow their assets while boasting high margins due to relative price inelasticity of their products. This gives them exposure to two of the factors in the Fama-French five-factor asset pricing model (firms with low asset growth outperform firms with high asset growth) as well as to the profitability factor (firms with high gross profit margins outperform firms with low gross profitability) (see Fama and French, 2015).

Based on this and similar analysis, researchers argue that ESG itself is generally not an investment factor but a proxy for other factors. For ESG oriented investors this is good news as it implies that the exclusion of these industries can be achieved without impairing expected returns as long as portfolio's factor exposure is being controlled respectively (high margin tobacco firms can be replaced by other high margin businesses). Aside from suffering from the same theoretical and empirical weaknesses as the underlying Fama-French five-factor model and its offsprings, the return explanation in Blitz and Fabozzi, 2017 unfortunately only covers a narrow set of 'sin' stocks. They study solely companies in the controversies category, namely firms active in the alcohol, tobacco, gambling or defense industries. Obviously, modern ESG investors approach the topic with a broader set of values in mind resulting in a longer and more diverse list of 'sin' stocks.

Furthermore, more sophisticated ESG driven investors equipped with an extensive analytical toolbox are also moving beyond primarily industry based inclusion and exclusion criteria. This means, while excess returns of 'sin' stocks can be explained by the five-factor asset pricing model, disqualifying the traditional definition of 'sin' as a factor, the model may still fail to explain future returns of high minus low ESG score. Obviously, as relatively sophisticated ESG investing is such a recent phenomenon, no empirical finance model will be able to detect this in the near to medium-term future.

Thus said, if various financial statement ratios (gross profitability, asset growth ...), valuation figures (price/book, price/earnings ...) and market price items (size, beta, momentum, volatility ...) qualify as factors, why shouldn't a firms non financial characteristics play an independent role in asset pricing too? The earlier introduced risk based return explanation framework



yielded a clear implication for ESG oriented investing: Lower absolute returns, equal risk adjusted returns. Once we introduce ESG as an investment factor however, things become more complicated. As outlined Blitz and Fabozzi, 2017, looking solely at traditional 'sin' stocks found that their outperformance is attributable to exposure to the quality factors profitability and asset growth. Obviously these quality factors in the five-factor model contradict the CAPM as well as the older three-factor model (less risky stocks outperform riskier stocks). It is one of the weaknesses of the paper and the framework that Eugene Fama and Kenneth French didn't bother to resolve this contradiction. We think that risk based arguments should be the primary but not the only explanatory variable in explaining factor returns.

Empirical findings about market structure and behavioral biases free asset pricing models from the corset of theoretically sound but empirically dissatisfying concepts.

5 Our approach to the topic

We therefore approach the topic in a two step process (also illustrated in Figure 7):

- If high minus low ESG score is an investment factor, is it associated with higher or lower risk exposure?
- Is the factor likely to be priced correctly or not and will the high ESG score portfolio thus deliver higher or lower risk adjusted returns than the low ESG score portfolio?

As described earlier, in our eyes, ceteris paribus a **low ESG score** indicates **higher risk**. This does not rule out that companies with low ESG scores can have exposure to fundamental quality factors such as high growth or high margins as it is the case for the traditional 'sin' stocks, it only implies that controlled for fundamental quality, low ESG score companies are inherently more risky. So can investors harvest a **risk premium** by going long stocks with low ESG scores? Unfortunately, answering the second question is way more tricky. As outlined earlier, factors such as the Fama-French profitability factor already violate the idea of a positive risk/return trade-off. If a phenomenon is not in-line with some kind of risk based explanation, there should

however be an alternative narrative, such as a rational rooted in behavioral finance, to support it.

5.1 Watch out if #Larry joins the party

With increasing proliferation of ESG related data and **regulatory pressure** to integrate it in the investment process, it seems more and more unlikely that ESG as a factor is or will be underpriced. On the contrary, it is probably the first time in the history of equity investing that market participants are more or less forced to favor a certain subset of stocks (setting aside special rules for endowments with regards to dividends for instance). It therefore seems likely that in the short to medium term professional investors will continue to rush into highly rated stocks (as the infamous example of #boohoo showed) which is likely to result in initial outperformance. In the long-term there is still the likelihood that investors systematically underestimate the impact of topics such as climate change on corporations which may result in prolonged outperformance at least of the E-factor. Given the regulatory pressure on asset managers to adopt ESG standards and the great degree of media attention the topic attracts, investors should in in the long-term not bet on such an anomaly but rather assume the opposite: Lower risk = lower returns. Alongside disclosing the ESG profile of their products, asset and wealth managers should therefore also indicate to their clients that taking a hard stance on the topic may result in lower (absolute, not risk-adjusted) returns unless they choose to actively take exposure to other factors associated with higher returns. In our eyes the latter is a very promising approach. Most importantly we have started to combine ESG oriented screening and scorings with our Quantamental factors such as multi-factor Value and Momentum models. Sophisticated optimization procedures based on multi-factor risk models allow us to construct highly customized portfolios that avoid exposure to undesirable companies while maintaining highly favorable overall characteristics, controlled tracking error and low turnover.

6 Conclusion

We are taking a pragmatic stance on the topic. Realistically, following the logic outlined in the table on page 6, we assume that most investors, including ourselves, will usually find their investment process in the first two columns. Together with our Fin-Tech arm, Amadeus Quantamental, we have created the capabilities to incorporate a multitude of ESG related criteria in our products and individual solutions. To foster transparency and enable clients to understand the process and its various aspects easily, Amadeus Quantamental also developed a detailed, web-based interactive ESG report for every corporation covered by MSCI's ESG database (available also as white label

version upon request). In the short-term, regulatory changes and respective pressure to adopt ESG criteria in the investment process is likely to result in sustained demand for securities that score well. Over time we expect this to abate and in the long-term there may be a price associated to being 'good'. This is especially the case if investors take it seriously and go beyond simple ESG screened solutions. From US Treasuries to Chinese stocks many traditionally attractive assets classes confront sustainability oriented investors with tough questions. Having the right setup to tackle those and take informed decisions is not the worst starting point.

7 Categories of ESG investors

The various approaches to sustainable investing				
Category	ESG-screened	ESG-managed	Impact-related	Impact-generating
	investments	investments	investments	investments
Objective	Mitigation of	Systematic reflec-	Address social and	Actively contribut-
	ESG-related risks	tion on ESG-related	environmental chal-	ing to social and
	and/or ethical	risks and opportuni-	lenges and goals	environmental solu-
	considerations	ties		tions and transfor-
				mations
Materiality	Materiality not	Materiality not mea-	Proof of materiality	Proof of materi-
	addressed, i.e., no	sured, i.e., only ba-	through the assess-	ality through the
	further detailed	sic description of ap-	ment of outputs via	measurement of
	description of	proach or outputs	benchmark analysis	expected and gener-
	approach or outputs		or SDG (Sustainable	ated impact
			Development Goals) alignment	
			angiment	
General approach	Any consideration	Comprehensive set	Comprehensive set	Focus on impact
	of E, S or G fac-	of exclusion criteria,	of exclusion criteria,	generation by pro-
	tors in investment	at least one further	sophisticated com-	viding additional
	appraisals, typically	pre-investment de-	bination of pre- and	capital, incorporat-
	focusing on exclu-	cision approach* is	post-investment**	ing forward-looking
	sion criteria	applied	decision approaches	targets and/or post-investment**
				decision approaches
				decision approaches
Documentation	Basic description	No detailed docu-	Detailed description	Detailed description
	and ideally external verification	mentation	and external verification	and external mea- surement of impact
	vermeation		Cauon	achievements and
				targets

Table 1: * Pre-investment decision approaches: exclusions, norms-based screening, best-in-class, ESG integration, thematic funds
** Post-investment decision approaches, voting, engagement

Source: Impact Investing: Ein Segen für die Armen oder bloss für die Banken?, Amadeus Quantamental

8 Appendix

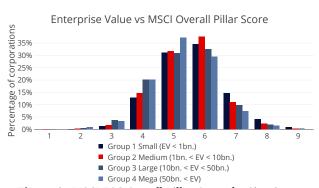


Figure 8: MSCI ESG Overall Pillar Scores by Size Group Source: MSCI, Amadeus Quantamental

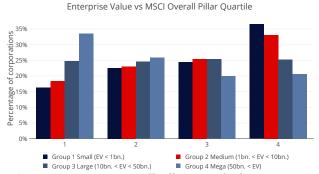


Figure 9: MSCI ESG Overall Pillar Quartiles by Size Group Source: MSCI, Amadeus Quantamental

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