CONTEXT

This project aims to provide an analysis on the differences between european ETFs and european Mutual Funds that have decided to invest according to ESG principles. The dataset, from which this analysis takes its cue, is publicly available on the website [1]. The original dataset contains 57,603 Mutual Funds and 9,495 ETFs. The analysis will mainly focus on the 10 most common categories of ETFs and Mutual funds within the dataset.

We will see what are the ESG ratings Morningstar has given them, their returns over the years and year to date, the most common benchmarks that ETFs track passively (due to their passive management nature) and which of them Mutual funds try to overperform (given that they are actively managed and they have a team of analysts), how many ETFs and Mutual funds have been created in the last 20 years, what their equity style is and finally the frequency with which dividends are distributed during the year. Before we get started, here is a brief explanation of what ESG investments and ratings are

ESG INVESTMENTS. WHAT ARE THEY?

Quoting the source [2], when we talk about investing according to ESG criteria, we are talking about a regulated approach to evaluate companies that are sensitive to environmental, social and governance (ESG) issues. ESG analysis covers a wide range of environmental, social and governance issues that can address sustainable investments."

ESG ratings represent an impartial assessment of a company's commitment to sustainable business practices:

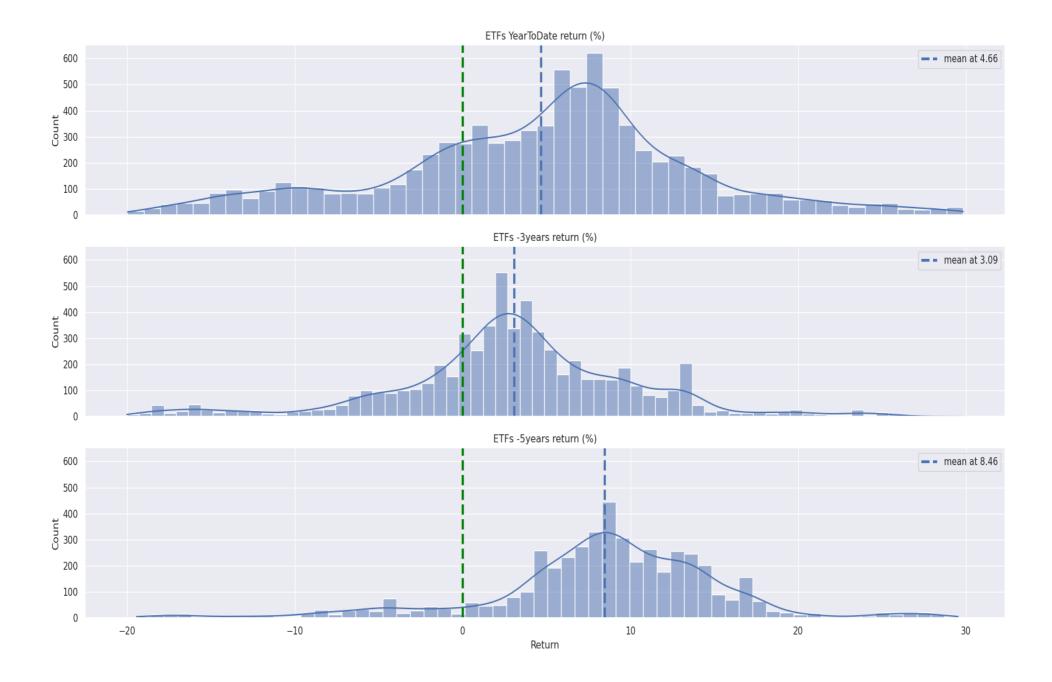
- A company's ESG score does not depend on the industry in which it operates. A security can have a high rating even if its sector of belonging is lagging behind others and vice versa. For example, not all oil companies have low ESG scores, and not all tech companies have high ESG scores.
- ESG assessment methods vary from sector to sector. Factors E, S and G have different weights depending on the sector in which the company operates. The points taken into consideration also change, based on the most important elements for the performance of a particular company.

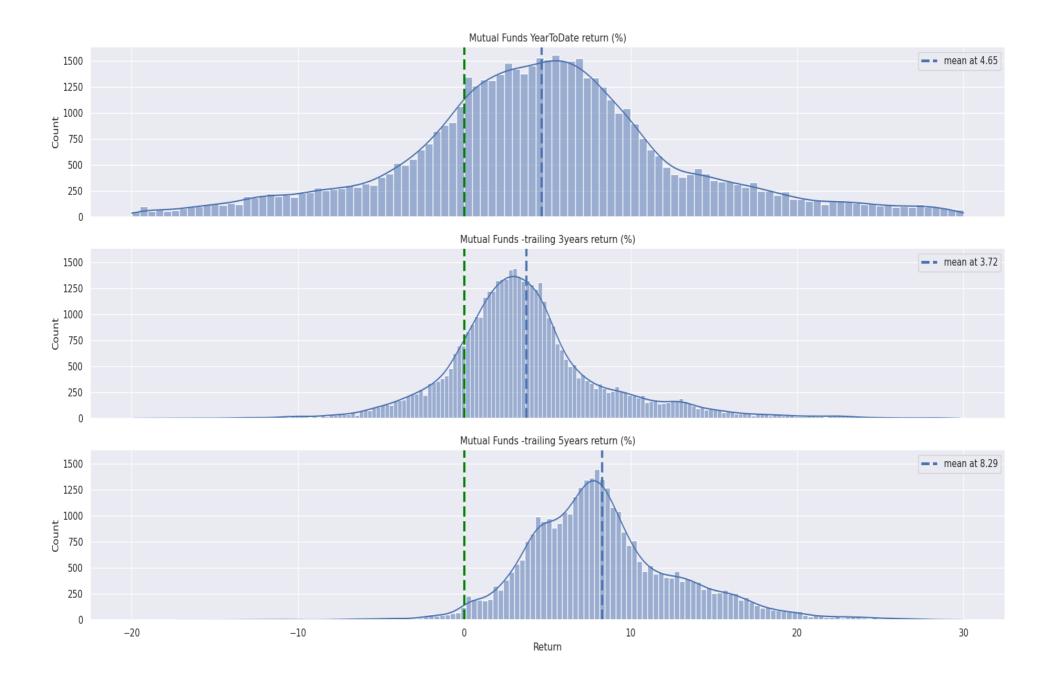
SITOGRAPHY

[1] https://www.morningstar.co.uk

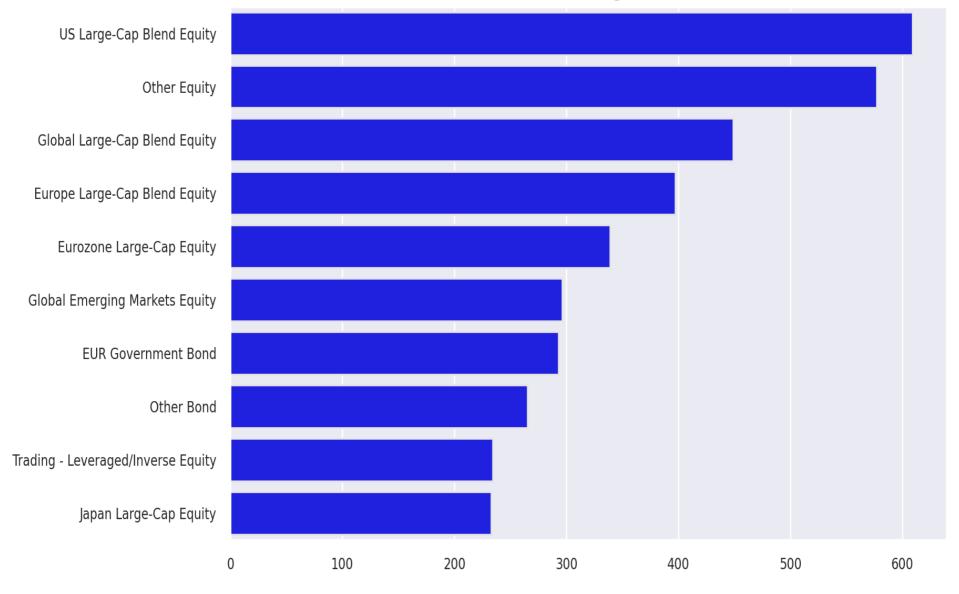
 $[2] \ \underline{https://www.ishares.com/it/investitori-professionali/it/temi-d-investimenti/investimenti-sostenibili/what-means-esg?} \\ \underline{switchLocale=y\&siteEntryPassthrough=true}$

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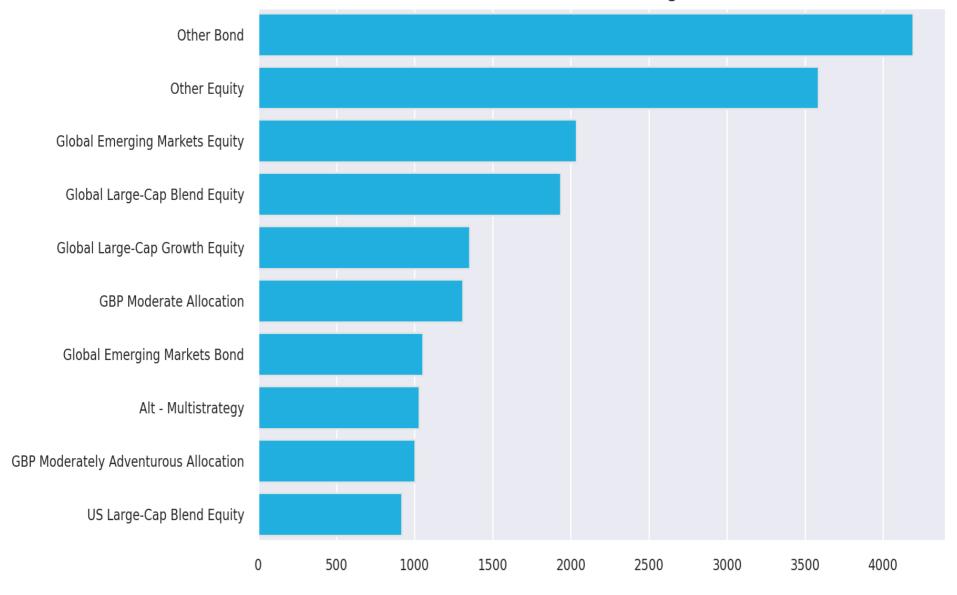




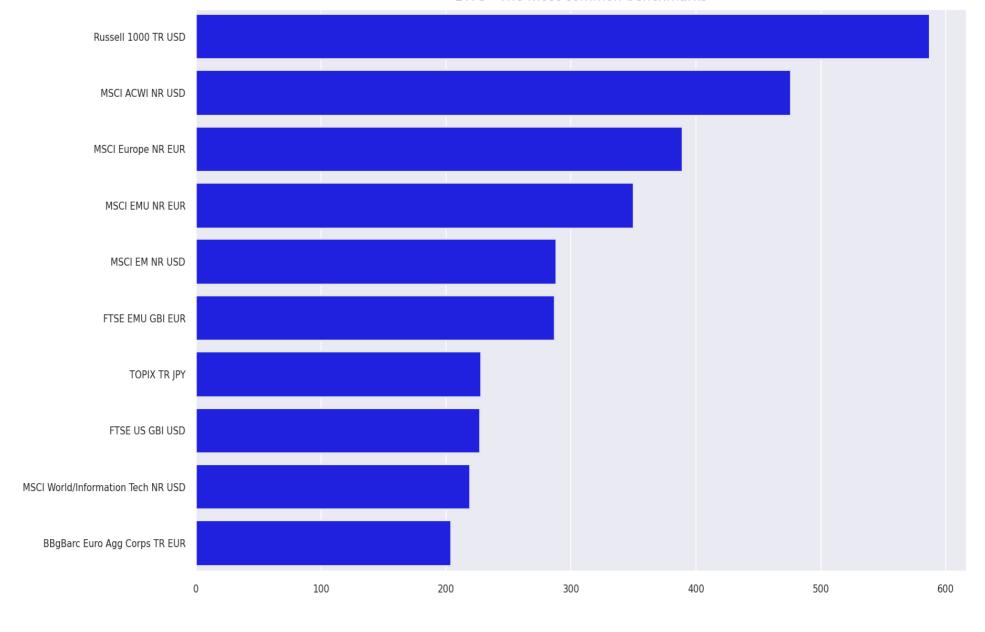
ETFs - categories



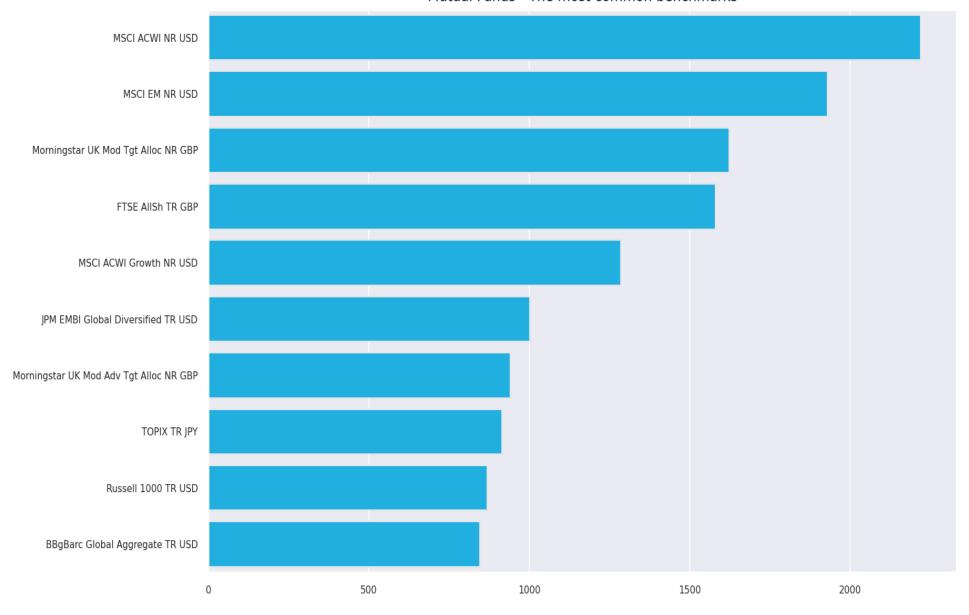
Mutual Funds - categories

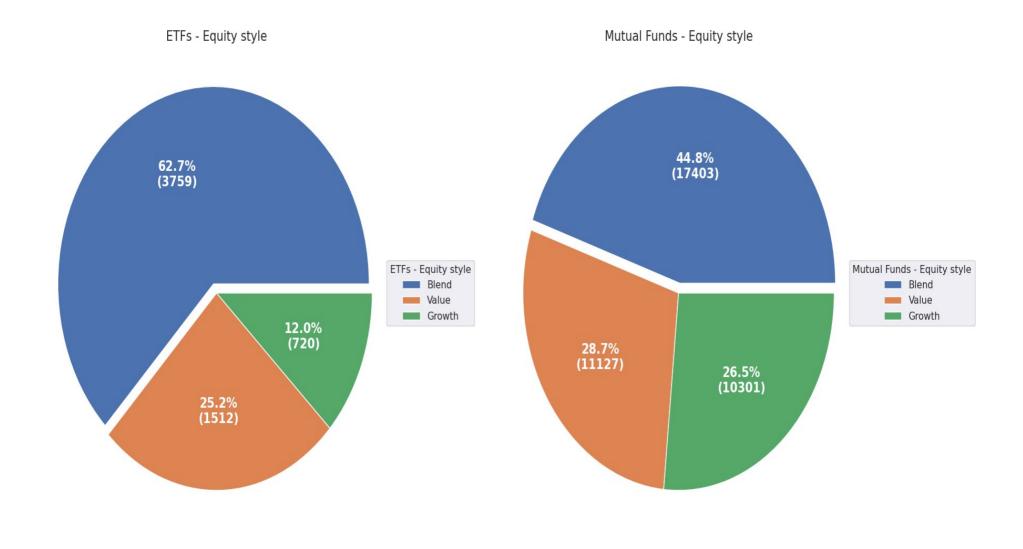


ETFs - The most common benchmarks

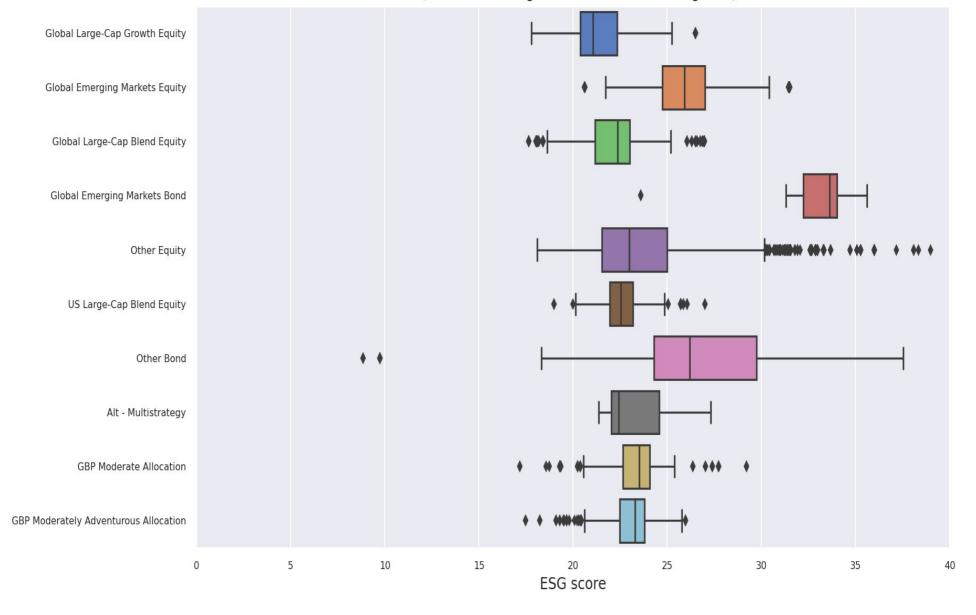


Mutual Funds - The most common benchmarks

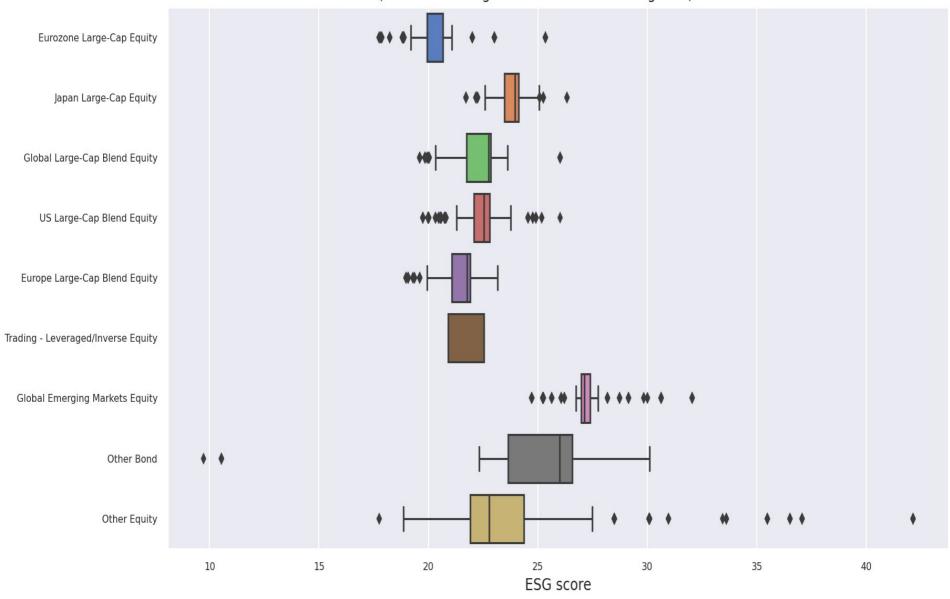


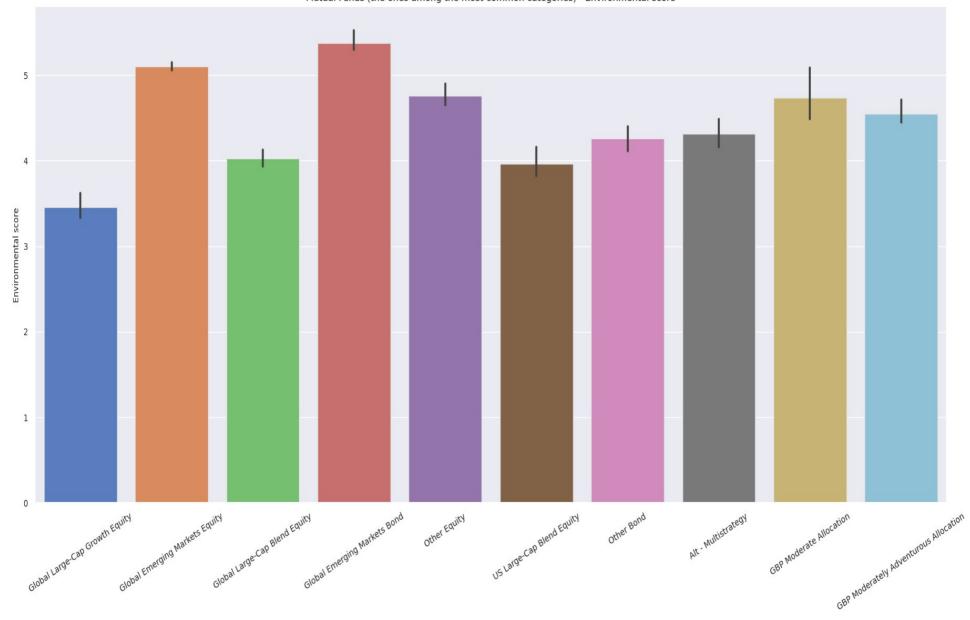


Mutual Funds (the ones among the most common categories) - ESG score

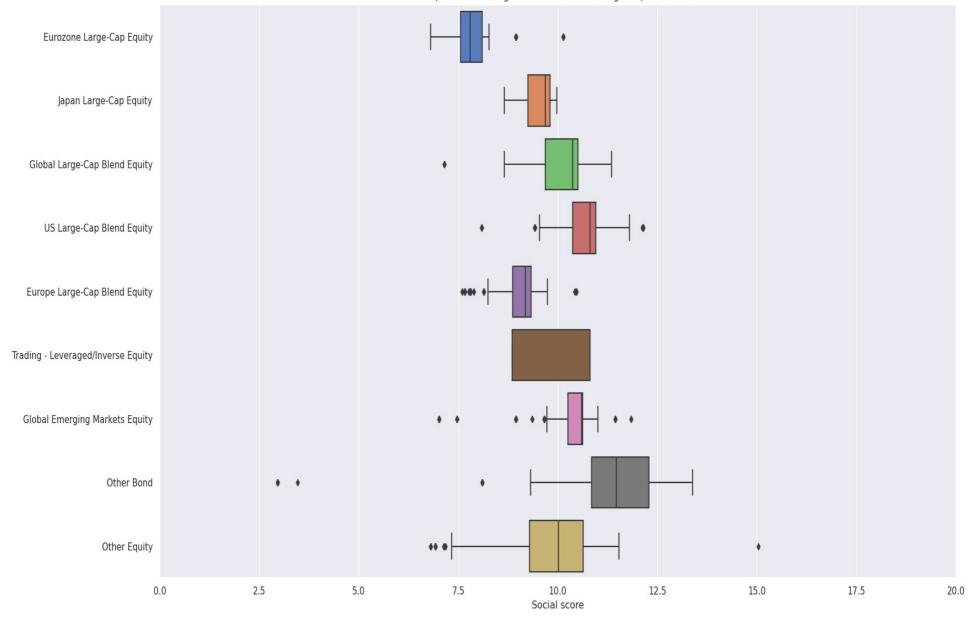


ETFs (the ones among the most common categories) - ESG score





ETFs (the ones among the most common categories) - Social score



Mutual Funds (the ones among the most common categories) - Social score Global Large-Cap Growth Equity Global Emerging Markets Equity Global Large-Cap Blend Equity Global Emerging Markets Bond Other Equity US Large-Cap Blend Equity . Other Bond Alt - Multistrategy GBP Moderate Allocation GBP Moderately Adventurous Allocation

7.5

10.0

Social score

12.5

15.0

17.5

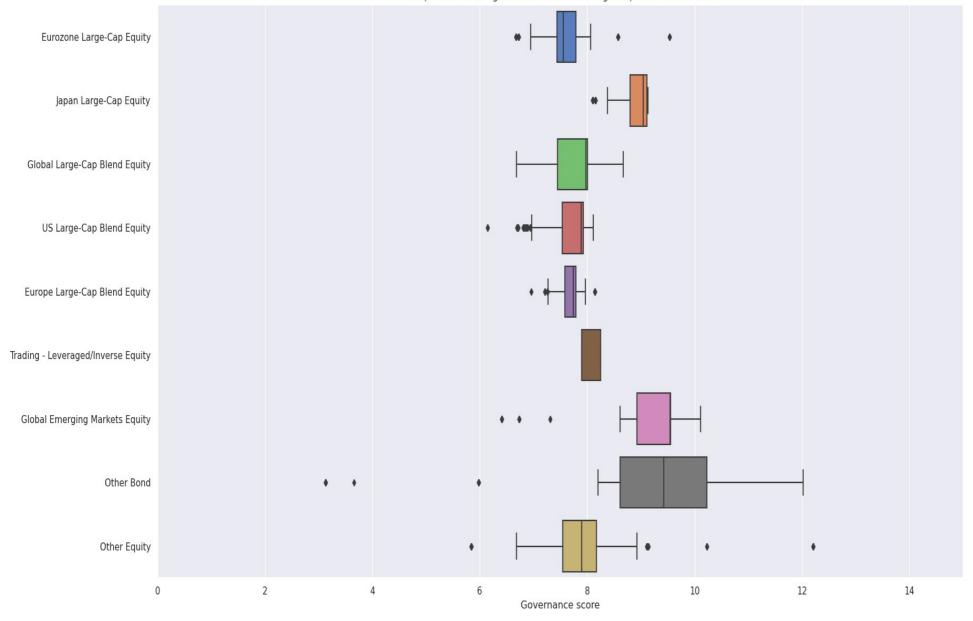
20.0

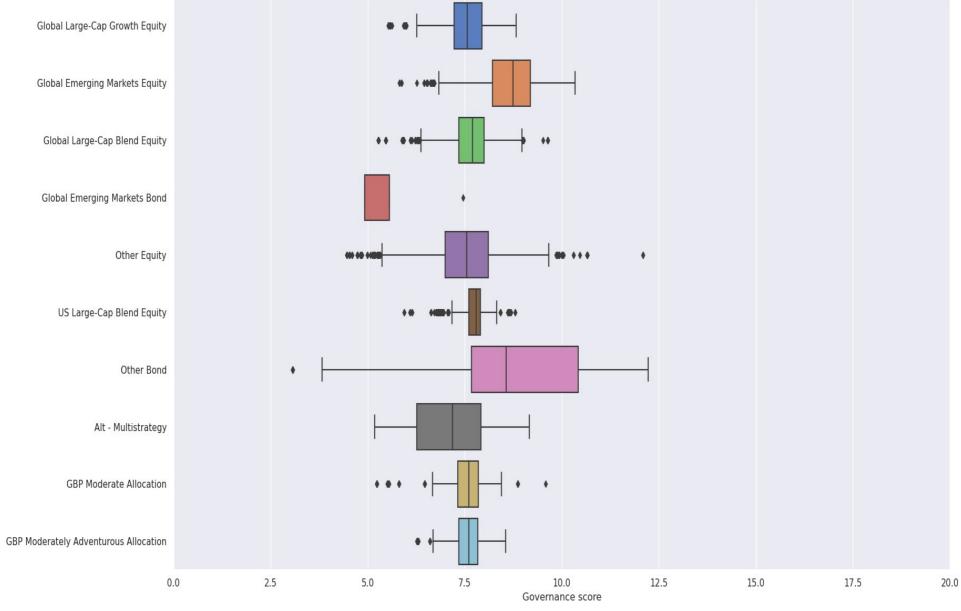
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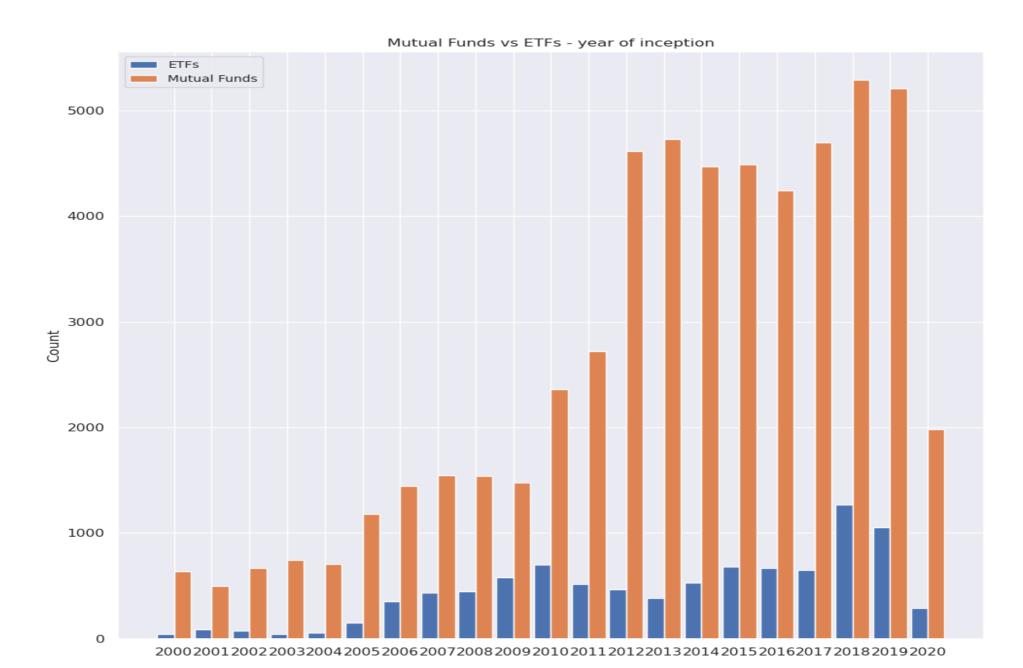
2.5

5.0

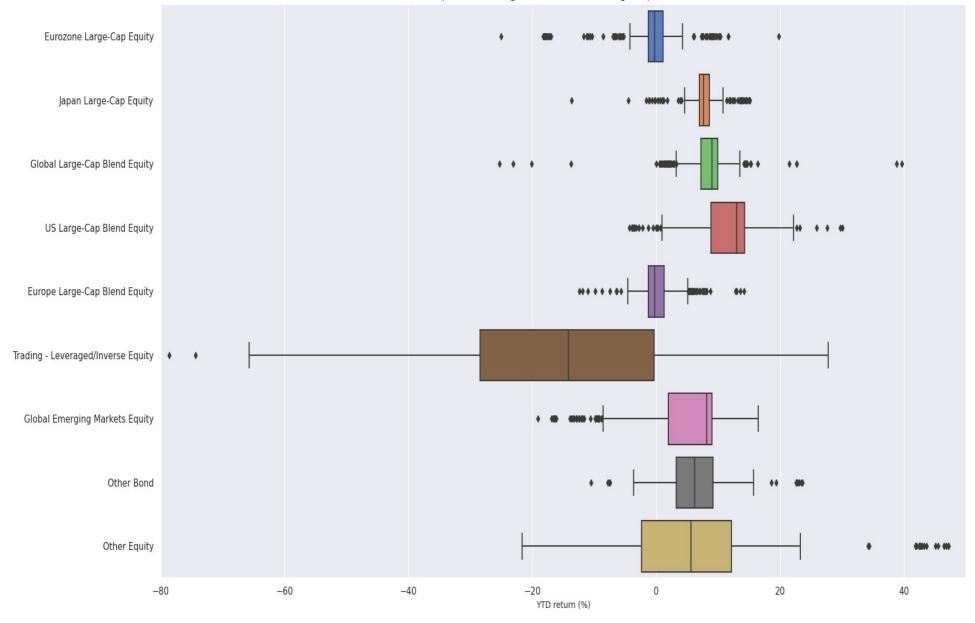
ETFs (the ones among the most common categories) - Governance score



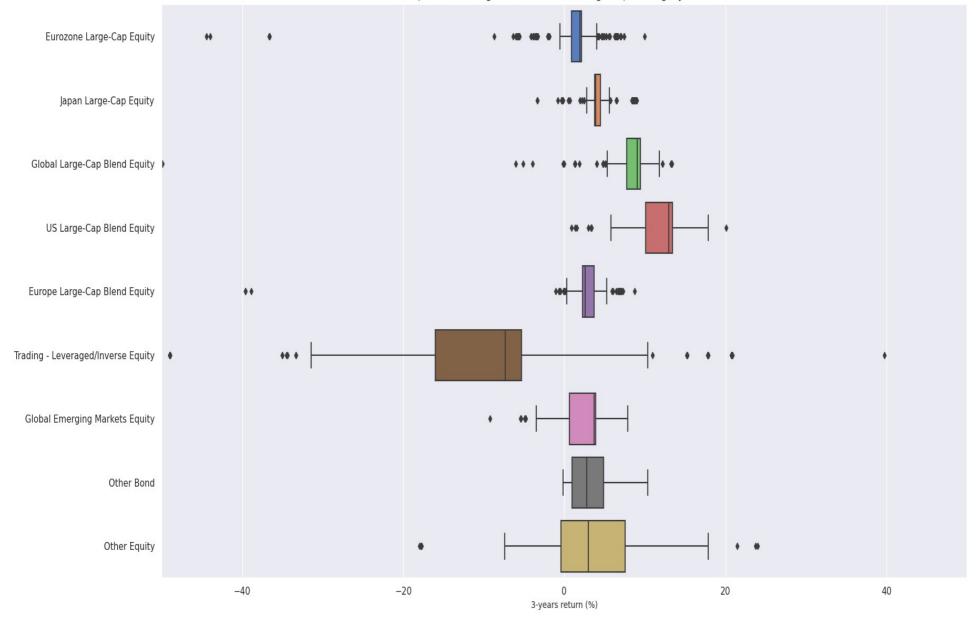




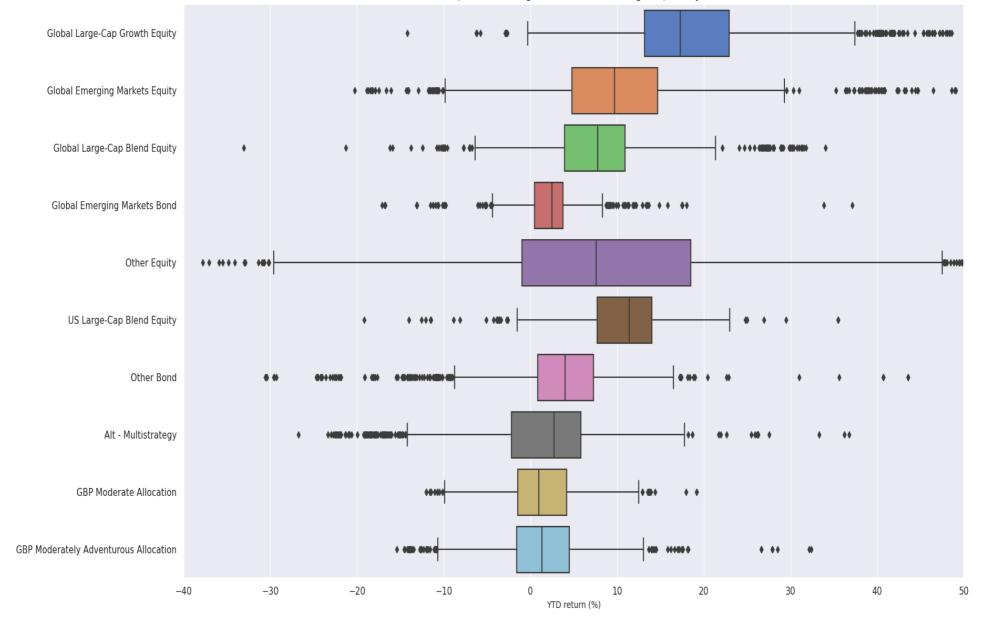
ETFs (the ones among the most common categories) - YTD return



ETFs (the ones among the most common categories) - Trailing 3-years return



Mutual Funds (the ones among the most common categories) - YTD years return



Mutual Funds (the ones among the most common categories) - Trailing 3-years return Global Large-Cap Growth Equity Global Emerging Markets Equity Global Large-Cap Blend Equity Global Emerging Markets Bond Other Equity US Large-Cap Blend Equity ** Other Bond Alt - Multistrategy **GBP Moderate Allocation** GBP Moderately Adventurous Allocation 30 20 20 20 30 00 3-years return (%)

Mutual Funds vs ETFs (the ones among the most common categories) - dividend frequency **ETFs Mutual Funds** 5000 4000 Count Count 2000 1000 0 Annually Four times a year Monthly Quarterly Three times a year Weekly