University of Zurich[UZH]

Passive Investments and Climate-friendly Investing using the Example of Swiss Pension Funds

Bachelor Thesis

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Executive Summary

With the adoption of the Paris Agreement and thus the acceptance to align financial flows with the global climate target, the issue of climate-friendly investment has increasingly come to the foreground in recent years. There is a growing trend for various actors, from private individuals to non-governmental organizations and governments, to exert pressure on large investors to align their investments with the Paris Agreement, to ensure a rapid transition to a low-carbon economy.

In recent years, various players in Switzerland have also endeavoured to align the Swiss financial centre with the Paris Agreement. In 2017, the Federal Office for the Environment and the State Secretariat for International Financial Matters initiated a pilot test to assess the alignment of the financial portfolios of Swiss pension funds and insurance companies with the Paris Agreement. The study concluded that the financial portfolios of Swiss pension funds are currently on a 4°C-6°C pathway. However, since Swiss pension funds are among the largest investors in Switzerland and play an important social role, as they are responsible for retirement provision, it is a growing demand that Swiss pension funds align their investments with the Paris Agreement to protect the retirement provisions of the Swiss population.

There is currently a gap in academic studies dealing with the issue of climate-friendly investing. Some research has focused on the performance of low-carbon investment products, but not on whether these low-carbon products also are in alignment with the Paris Agreement.

This thesis tries to close this gap by investigating the possibilities for passive investors to align their investments with the Paris Agreement and by testing climate-friendly indices for their 2°C compatibility.

Section 2 provides an overview of climate risks and their financial implications. Chapter 3 first presents the Swiss pension fund structure and then places it in the context of climate change. Section 4 presents possible solutions for passive investors to align their investments with the Paris Agreement. Section 5 then deals with the empirical analysis of the climate-friendly indices. Two climate-friendly indices of STOXX are examined. On the one hand the EURO STOXX 50 Low Carbon with focus on the European area and on the other hand the STOXX Global Climate Change Leaders Index. In a first step, those indices are tested for their 2°C compatibility using scenario analysis to investigate if they are in line with the Paris Agreement. In a second step, the performance of the indices is compared to the performance of their corresponding benchmark (i.e. EURO STOXX 50 and STOXX Global 1800 respectively). As the two climate-friendly indices were not launched until February 2016, the performance comparison is carried out using back-tested data.

The scenario analysis of the climate-friendly indices and their benchmarks showed that currently none of the indices is entirely on a 2°C pathway. However, it was found that a 2°C compatibility can be achieved for individual technologies, especially in the power sector. Another interesting finding of the analysis was that the benchmarks, which have no tilt against GHG emission-intensive companies, perform better in some categories than the climate-friendly indices. Another interesting finding of the analysis was that the benchmarks, which have no tilt against GHG emission-intensive companies, perform better in some categories than the climate-friendly indices. The performance analysis revealed that the climate-friendly indices have a similar or better risk-return profile compared to their benchmark. No final conclusion can be drawn as to whether climate-friendly indices are an appropriate solution for passive investors to align their investments with the Paris Agreement. This issue should be further explored in order to draw a definite conclusion.