



Lisbon School
of Economics
& Management
Universidade de Lisboa

MASTER OF SCIENCE IN FINANCE

MASTERS FINAL WORK PROJECT

INVESTMENT POLICY STATEMENT: CARE INTERNATIONAL

RITA SOUSA LUCAS

JUNE 2026



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Abstract

The purpose of this Investment Policy Statement (IPS) is to establish a framework for the CARE Investment Fund, whose main client is the humanitarian NGO, CARE International. This institution is dedicated to overcoming global poverty and empowering communities in vulnerable situations. This fund operates under a strict fiduciary duty, aligned with the long-term humanitarian mission of the organization to ensure that all investments are handled with responsibility, transparency and following ESG principles.

The optimal portfolio was obtained by conducting a 2-step optimization, in order to maximize risk-adjusted returns while ensuring the environmental and social requirements were being met. With several constraints regarding minimum and maximum allocations to asset classes and ESG assets, the portfolio was found using Sharpe Ratio maximization, following the Mean Variance Theory. The results obtained were an annualized expected return of 15.41% and a volatility of 14.79%. The portfolio is equity-oriented, using fixed income securities and alternative investments to increase diversification and decrease volatility.

The risk analysis was conducted by calculating Value-at-Risk and Expected Shortfall through three methodologies in order to simulate the potential losses the portfolio might suffer under financial stress. Moreover, two Monte Carlo simulations were conducted to predict the portfolio outcomes for the next twelve months and five years, as well as a risk matrix to evaluate qualitative risks the portfolio might face.

JEL Classification: C6, E44, G11

Keywords: Asset Management; Portfolio Theory; IPS; Institutional Investors.

Resumo

O propósito deste Investment Policy Statement (IPS) é estabelecer um enquadramento para o CARE Investment Fund, cujo principal cliente é a ONG de ajuda humanitária CARE International. Esta instituição dedica-se ao combate à pobreza a nível global e ao empoderamento de comunidades em situação de vulnerabilidade. O fundo opera sob um rigoroso dever fiduciário, alinhado com a missão humanitária de longo prazo da organização, assegurando que todos os investimentos são geridos de forma responsável, transparente e em conformidade com os princípios ESG.

A carteira ótima foi obtida através de um processo de otimização em duas etapas, com o objetivo de maximizar os retornos ajustados ao risco, garantindo simultaneamente o cumprimento dos requisitos ambientais e sociais definidos. Tendo em consideração diversas restrições relativas às alocações mínimas e máximas por classes de ativos e dos ativos ESG, a carteira foi determinada através da maximização do Índice de Sharpe, seguindo a Teoria da Média-Variância. Os resultados obtidos correspondem a uma rendibilidade esperada anualizada de 15,41% e a uma volatilidade de 14,79%. A carteira apresenta uma orientação predominantemente acionista, recorrendo a instrumentos de rendimento fixo e a investimentos alternativos para aumentar a diversificação e reduzir a volatilidade.

A análise de risco foi realizada através do cálculo do Value-at-Risk e do Expected Shortfall, recorrendo a três metodologias distintas, com o objetivo de simular as potenciais perdas que a carteira poderá sofrer em cenários de tensão nos mercados financeiros. Adicionalmente, foram efetuadas duas simulações de Monte Carlo para projetar o desempenho esperado da carteira ao longo dos próximos doze meses e dos próximos cinco anos, bem como elaborada uma matriz de risco destinada a avaliar os riscos qualitativos a que a carteira poderá estar sujeita.

Classificação JEL: C6, E44, G11

Palavras-Chave: Gestão de Ativos; Teoria da Carteira; IPS; Investidores Institucionais.

Acknowledgements

Firstly, I would like to thank my parents and grandmothers. Without their unconditional support, this process would have been way more challenging. I thank them for supporting me, rooting for me, and always being by my side providing the best conditions for me to thrive and be able to do my best.

Alongside my parents, I would like to thank my best friends. They have been by my side every day, hearing my complains and ideas, reminding me to take breaks, and feeding me when needed. I thank them for every water bottle refill, snack or simply for plugging in the charger for my computer. This work was completed also because of them.

I am deeply thankful for my supervisor, Professor Haoxu Wang. His guidance, availability, and support of my ideas was crucial throughout the whole process of completing this thesis. The feedback provided allowed me to improve my work and kept me on the right track to deliver the best work possible.

Abbreviations

AUM – Assets Under Management

CARE – CARE International

CEF – Constrained Efficient Frontier

CHF – Swiss Franc

CIO – Chief Investment Officer

CML – Capital Market Line

CRO – Chief Risk Officer

EF – Efficient Frontier

ES – Expected Shortfall

ESG – Environmental, Social and Governance

ETFs – Exchange Traded Funds

EU – European Union

FinMA – Swiss Financial Market Supervisory Authority

IEEFA – Institute for Energy Economics and Financial Analysis

IPS – Investment Policy Statement

MPT – Modern Portfolio Theory

MVP – Minimum Variance Portfolio

NGO – Non-Governmental Organization

SAA – Strategic Asset Allocation

SFDR – EU Sustainable Finance Disclosure Regulation

SRI – Socially Responsible Investments

U.S. – United States of America

VaR – Value at Risk

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Executive Summary

This Investment Policy Statement defines the investment strategy for the CARE Investment fund. It establishes the main return objectives, risk metrics and oversight mechanisms for the fund. The main focus is to determine the optimal way of balancing financial and non-financial objectives by combining ESG securities in an equity-oriented well-diversified portfolio.

In accordance with the governance structure, CARE International manages its investable assets in a transparent, responsible, and consistent way. The responsibilities are divided between the Investment committee, the Chief Investment Officer and the Chief Risk Officer. They must monitor, revise, and ensure all regulations are being complied with and all defined limits are being respected.

The fundamental purpose of the CARE Investment Fund is to optimize returns while respecting the established risk level of the fund. The fund will invest mainly in equities and will include fixed income securities and alternative investments to enhance diversification and mitigate risk. The annualized expected return is 15.41% and the expected volatility is 14.79%.

CARE's moderate risk tolerance is significantly shaped by its mission-oriented responsibilities. Value-at-Risk and Expected Shortfall are some of the metrics used to assess the portfolio's risk as well as Monte Carlo Simulations and a risk matrix to evaluate other possible threats the first two measures are unable to identify.

1. Scope and Purpose

This Investment Policy Statement (IPS) establishes a clear framework for a responsible handling of CARE International's investable assets by the CARE Investment Fund. It is important to note that CARE International is a real, active institution, however, the CARE Investment Fund is a hypothetical structure established for academic purposes. The primary client of this IPS is CARE International, a humanitarian NGO (Non-Governmental Organization) based in Switzerland focused on overcoming poverty. CARE held a fundraising gala where all the money raised will be invested with the objective of financing a new project the organization will carry out. This project will start in 2036 and will take place in Mali. Together with the proceeds from the fundraising, the investment will also have contributions from public investors, such as the Swiss government, and private investors. All contributors participate strictly at the fund level, investing into the fund rather than individual project components.

CARE was founded in 1945 in the United States of America and, in 1982, the organization changed to its current form with a new name, CARE International. They put women and children in the centre of their mission since they believe their goals can't be achieved until all people have equal rights and opportunities. They develop projects worldwide, in several areas such as food, water, health, education and economic growth, mainly focused on empowering women and expanding their economic and leadership opportunities, consequently improving the quality of life of the whole community.

The *"She's SMART: Water Smart Agriculture Program"* is a program included in the "Water+" project, centred on helping women farmers grow more food in countries where water is scarce and farming techniques are out-dated, while empowering them and making them leaders in their communities. It was started by CARE in 2017, lasted 3 years and was implemented in Ghana, Malawi and Mali. The women had an increase in their income of 27% and 18% in Malawi and Mali, respectively. Encouraged by the success of the project, CARE is now looking to continue its intervention in other towns in Mali.

This IPS will define the objectives, tenets and rules for an investment strategy aligned with CARE's mission, ensuring all resources are managed with responsibility and transparency. It will provide guidance for the selection, management and monitoring of the investment with clear criteria for return objectives, risk management, asset selection,

and performance assessment, to ensure its alignment with the organization's liabilities and long-term mission.

CARE International complies with the Swiss law and the provisions of the Swiss Financial Market Supervisory Authority (FinMA) and the fund will be denominated in CHF. The investment activities will then comply with the Swiss financial regulations and standards for non-profit organizations. The fund will be working as a Closed-end fund and will be managing a 1M CHF portfolio.

The target return is derived from the long-term objective of capital growth while maintaining sufficient resources to support the project. The portfolio will follow an equity-oriented strategy focused on growth and designed to maximize risk-adjusted returns at the same time that complies with the risk constraints.

In alignment with CARE values, the investment decisions will take into consideration and incorporate Environmental, Social and Governance (ESG) principles, aligning with the Article 8 of the SFDR regulation, prioritizing instruments that promote human rights, gender equality, sustainable development and social inclusion. Therefore, some sectors will be excluded from the investment options since they conflict with CARE's humanitarian purpose.

2. Governance

The management of CARE International's investable assets is conducted in a transparent, accountable, and consistent manner in conformity to the governance framework.

The Investment Committee, appointed by the Board of Directors, has the ultimate fiduciary responsibility to supervise CARE's investable assets. The Committee approves the IPS as well as any changes made to the investment strategy or the assets allocation and oversees the implementation of the policy. It monitors the managers and reviews the portfolio's performance against benchmark and elaborates recommendations on rebalancing or revisions of the policy. It is also in charge of ensuring compliance not only of the Swiss regulation but also any internal policies in place.

The Chief Investment Officer (CIO) is responsible for the execution of the policy previously approved and for assuring its implementation by the active manager. Additionally, the CIO has the task of doing the annual revision of the IPS jointly with the Investment Committee. Other revisions might occur if forced by any significant changes in regulation, liabilities or funded status. Moreover, the CIO establishes if there is a need for external advisers, which would be hired for specific mandates. This decision needs to be approved by the Committee.

Risk Management is of the responsibility of the Chief Risk Officer (CRO). The CRO ensures the exposure limits are being respected and issues quarterly Risk Management Reports that are then reviewed by the Investment Committee.

Furthermore, the IPS must align with Article 8 of the SFDR regulation and comply with the Swiss law through the provisions of the Swiss Financial Market Supervisory Authority (FinMA). It must also exclude sectors and companies with controversial activities, such as Alcohol, Civilian Firearms, Controversial Weapons, Conventional Weapons, Gambling, Nuclear Power, Nuclear Weapons, and Tobacco.

3. Risk Profiling

3.1 Investment Objectives

The main objective of the CARE Investment Fund is to provide the organization with a medium-term profitability level compatible with a moderate risk level, to support the “Water+” project and the populations that will benefit from it.

Given the social and environmental character of the project and the strong ESG component associated with the institution, one of the primary priorities of the fund is to select securities that adhere to ESG requirements, particularly social and environmental ones. Therefore, no investment will be allocated to industries that are not aligned with CARE's purpose and values. Furthermore, the fund will take into account ESG standards and target investments with an environmental and social impact. By using this strategy, the fund aims to provide value to investors while upholding high standards of corporate responsibility by striking a balance between financial goals and responsible investment principles.

Overall, CARE Investment Fund has as its primary objective to optimize returns while taking into account the risk level defined by the fund as well as providing additional value through the active management strategy, in order for the "Water +" project to be fully funded.

3.2 Return and Risk Requirements

The purpose is to fund the project starting in 2036 with a portfolio whose investment is aligned with CARE's values. It will have a moderate risk tolerance appropriate for the 10-year time horizon and will be focused on stable, sustainable growth over the 10 years while keeping in mind sustainability requirements.

Regarding the expected return objective, given the project's social and environmental objectives, it is acceptable to be lower than the one for traditional investments. This can be explained by several reasons. Firstly, this happens due to the Blended Finance nature of the fund. This is a concept where the investment is made by both public and private entities (*Flammer et al., 2025*). This approach is widely used to increase private sector

investment in sustainable development (*Blended Finance | Convergence, n.d.*), including green finance and renewable energy investments, and to mobilize private capital flows towards emerging and frontier markets (*Blended Finance, World Bank Group, n.d.*), both of which apply to this particular investment. Public investors contribute the amount necessary to reach the hurdle rate of private investors and, therefore, private investors don't need to sacrifice financial returns while, at the same time, social and environmental impacts are still created, which is the logic behind the "greenium" concept. According to the United Nations, the 'greenium', or green premium, is the idea that investors are willing to pay more or accept lower returns in exchange for sustainable impact (*D'Incau et al., 2022*). This is precisely why investors may accept a lower expected return than they would typically require for an investment. Additionally, due to the involvement of public contributors and the nature of this particular investment, the investors expect higher social and environmental returns even in the event of the financial return being lower.

However, although there is literature showing that investments that consider ESG requirements limit the volatility but also decrease the expected return for investors (*Cornell, 2020*), there is also literature showing that returns might actually increase. On more recent studies, the Institute for Energy Economics and Financial Analysis (IEEFA) showed that ESG-related funds outperformed traditional funds in 2023 (*IEEFA, 2024*), and Morgan Stanley's Institute for Sustainable Investing confirmed in their "Sustainable Reality" report the same trend happening in the first semester of 2025, with sustainable funds generating returns of 12.5%, compared to 9.2% of traditional funds (*Sustainable Funds Post Strong Returns | Morgan Stanley, 2025*). Moreover, the strategy of the fund aligns with an equity-oriented approach. Hence, considering all the information, the annualized return rate for CARE Investment Fund is expected to be between 10-12% per year in nominal terms.

The portfolio's risk will be measured through annualized volatility, expressed by the standard deviation. It is the risk measure underlying the Modern Portfolio Theory as well as the Sharpe Ratio, and therefore it was considered the appropriate indicator for best evaluating the volatility of portfolio's returns along with enabling the comparison with the benchmark. To further evaluate possible downside risks and losses from less favourable market conditions, other measures such as Value at Risk (VaR) and maximum drawdown will be implemented. The corresponding target values for the metrics mentioned will be determined in the following section (*3.3. Risk Tolerance*).

The measurement and review of CARE Investment Fund's performance is of the responsibility of the Investment Committee, which has quarterly meetings. Although a custom policy benchmark would be considered more appropriate to accommodate all the asset classes the portfolio will invest in, for simplicity and consistency, it was decided to use a single equity index, MSCI ACWI Index, as equities represent the largest percentage of the portfolio and more closely replicate the source of both return and risk. The benchmark will be used as a reference indicator over a 10-year investment period, and the financial performance of the portfolio will be assessed against said benchmark.

To measure the ESG performance of the fund, the ideal approach would be to compare the ESG social pillar score of the portfolio with that of the benchmark, through a weighted average method. However, due to lack of data, it was not feasible to gather the ESG score of every security present in the portfolio. Therefore, the ESG-oriented portfolio was given a minimum weight constraint, that will be further explained in Section 4.6.

In terms of distribution, any income, interest, or realized capital gain from the investment will be reinvested. The portfolio will be liquidated at the end of the 10-year horizon, and the proceeds of the investment will go directly to the funding and implementation of the "Water +" project. The exception to this case is if CARE needs proceeds to be withdrawn sooner for the project's benefit, in which case the withdraw cannot exceed 15% of the portfolio, under normal market conditions.

3.3 Risk Tolerance

CARE's moderate risk tolerance is highly influenced by its mission-driven obligations and the expectations of the several contributors, so the risk profile needs to be tailored to not compromise the project implementation. It is reflected by the long-term horizon and the strategy of the investment focused on growth. The time horizon of 10 years together with the absence of short-term liquidity needs allow the portfolio to adopt a higher level of risk. Considering it has a longer time to recover from possible losses, there is a greater disposition to accept periods of poor performance or higher market volatility.

The fund is exposed to several risks such as market risk and currency risk, a result of market fluctuations and international diversification respectively. Therefore, to measure the portfolio's risk, several metrics will be used, including 95% Value at Risk and

Expected Shortfall. To quantify the risk tolerance of CARE, the measures listed below will be followed:

- The annualized standard deviation of the portfolio should stay between 10% and 15%.
- The monthly 95% Value at Risk should not exceed 8% of total portfolio value. Furthermore, the monthly 95% Expected Shortfall should not exceed 10% of the total portfolio value.
- Maximum drawdown: The NGO can't tolerate big losses that would put at risk the execution of the project. A maximum drawdown of 15% will be implemented to avoid mission-threatening losses.

These thresholds reflect the strategy of the fund as well as its capacity to tolerate risk. They will be used as a benchmark to evaluate if the risk profile of the portfolio is consistent with its capacity for risk.

3.4 Constraints

In constructing the optimized portfolio, several constraints were used in order to maximize the portfolio potential given the conditions.

The portfolio has a time horizon of 10 years, at the end of which the fund will be liquidated and the proceeds will be used to finance the project. It must generate an annualized return rate between 10-12% per year, in nominal terms. All contributions from the fundraising gala will be used and are restricted to being invested in the project, alongside the contributions from other private and public investors.

CARE International complies with the Swiss law, and it is subject to the provisions of the Swiss Financial Market Supervisory Authority (FinMA), that state Swiss financial regulations and standards for non-profit organizations. Therefore, it needs to provide a prudent management, annual financial reporting and annual independent audit, a clear spending policy and it should encourage diversification. None of these regulations impose restrictions regarding maximum allocation to certain asset classes or per security but recommends an allocation that respects the organization's mission. However, if certain thresholds are surpassed, the client needs to be notified about the associated risks.

Consequently, the portfolio will have a maximum weight per security of 10%. The proceeds from the fund are tax-exempt under the Swiss law.

The investment fund will refrain from using derivatives like options, futures, or swaps to mimic leveraged positions, as well as any forms of leverage, including borrowing and other financial strategies.

Considering the ESG nature of the project and the institution, it is highly important that the investment has a social component and impact, however, given that the portfolio also has to provide a satisfactory financial return, the portfolio proceeds will be divided between a portfolio with high return securities, the “traditional portfolio”, and another that will guarantee the social component essential for the institution, the ESG-oriented portfolio. This is achieved by imposing constraints when selecting the right securities for the portfolio and will be explained further in the IPS.

The Swiss authorities lack a counterpart to the EU Sustainable Finance Disclosure Regulation (SFDR). Instead, the fund will utilize some of its guidelines regarding Socially Responsible Investments (SRI) to ascertain the appropriate methodology.

Firstly, the fund excludes investments in sectors and companies with controversial activities, such as Alcohol, Civilian Firearms, Controversial Weapons, Conventional Weapons, Gambling, Nuclear Power, Nuclear Weapons, and Tobacco. Secondly, the fund will prioritize companies with high ESG social pillar scores, specifically only choosing the ones whose value is above 9, in the Bloomberg scale, and those demonstrating a favourable trend in their ratings.

Assets might be removed from the security selection if they no longer meet the criteria established in this IPS. Reasons for being removed include a deterioration of financial quality, material changes in management or industry classification, rebalancing purposes, or loss of alignment with the ethical standards and mission of CARE.

4. Investment Design

4.1 Investment Philosophy

CARE's Investment Fund has a philosophy aligned with the mission the NGO pursues. The fund is ESG-motivated by definition, not just assuming investor preferences. It is focused on preserving capital and on taking responsible investments enabling a long-term value creation. It emphasizes the importance of diversification by taking on investments in various asset classes, allowing for the reduction in volatility. The investment strategy is designed around financing the project; therefore, it will prefer assets that are transparent, more liquid, sustainable and socially responsible, in order to honour CARE's principles, as well as to find a scientific way to combine social securities together for diversification benefits.

To meet these requirements, the portfolio will contain assets from a variety of asset classes and employ specific techniques to choose the best securities within each class. The ESG-oriented portfolio is mainly restricted to either stocks that present a high ESG social score or to equity or fixed income ETFs whose proceeds will directly impact and fund environmental and social causes, while the financial portfolio is less strict in these parameters but includes other selection strategies. These securities were carefully selected and filtered among several others in order to balance the two main objectives, social and environmental impact and financial performance.

Unlike typical investing, which has as its main concern Sharpe ratio maximization, the approach used in this investment incorporates non-financial objectives through imposing minimum weight constraints to the ESG-oriented portfolio, ensuring alignment with the social concerns of CARE. Following the European regulation (EU) 2019/2088, Sustainable Finance Disclosure (SFDR), financial instruments/ products are required to be classified according to their environmental and social impact. The three categorization levels clarify how different levels of sustainability integration are incorporated into an investment strategy. Article 6 funds, or Conventional, do not have any specific sustainability focus. Their strategy does not include specific sustainability goals or ESG restrictions and are only required to disclose how they integrate sustainability risks into investment decisions. Article 8 funds, or Light Green, encourage environmental and/or social characteristics, although sustainable investment is not the main objective. They

must follow ESG criteria and are required to disclose more information on how the integration is made. Finally, the Article 9 funds, or Dark Green, have the sustainable investment as their primary objective. Because of their emphasis on impact-investment, they must articulate more precise objectives and contributions and give more thorough reporting.

While CARE Investment Fund does not need to comply with the EU Sustainable Finance Disclosure Regulation (SFDR), the fund chooses to align with the social and environmental objectives of Article 8, while retaining the flexibility to invest in assets that do not meet specific ESG standards. It intends to use Article 8 framework regarding transparency requirements as a benchmark for a clear reporting.

4.2 Macroeconomic Outlook

In this section, the main macroeconomic indicators will be analysed both globally and regionally. Additionally, it will be analysed how the expectations for the next ten years regarding these same indicators influence the investment strategy, considering the attractiveness of different asset classes, with primary focus on the ones present in the portfolio.

The long-term capital market assumptions point to a moderate global growth rate in 2026 around 3%, slower than the 3.4% of 2024 and 2025 (*International Monetary Fund, 2026*), and below the historical average of 3.7% between 2000 and 2019. The recent geopolitical uncertainty, namely the continuation of the Ukrainian war and the war in the Middle East, contributed to a downward revision of the expected growth rate.

However, the growth rate is uneven between regions, with the United States of America (U.S.) slightly above 2% in 2025 and anticipating expanding at a rate of 2.3% in 2026, a 0.2 percentage point increase compared to the previous year. It is expected that the U.S. economy would expand more slowly in the upcoming years. When compared to the United States, the growth rate of the European Union (EU) is significantly slower. The predicted rate for 2026 is 1.3%, 0.3 percentage points lower than the value recorded in the previous year, and it is also foreseeable that this rate will remain in this range for the years to come.

The biggest contribution for the 3.1% global rate comes from emerging markets and developing economies. Although the growth is expected to slow down, the forecasts point that these regions will have a growth rate of 3.9%, a considerable deceleration when compared to the 4.4% registered in 2025. Even though these markets present a higher growth potential, they also come with greater risks, therefore, they will only be considered in the portfolio if the ESG contribution is sufficiently high, or for diversification reasons.

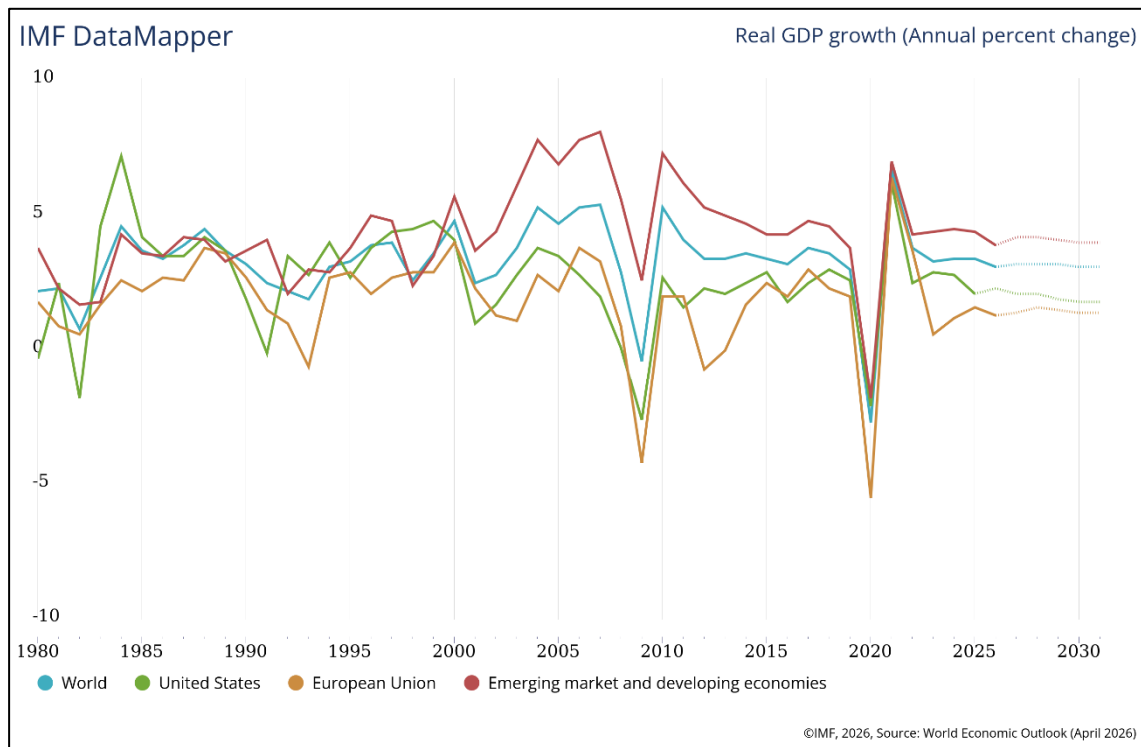


Figure 1 - Real GDP Growth

Source: IMF, April 2026, World Economic Outlook

Inflation also presents different estimates depending on the region. Overall, developed economies expect their inflation to be around or at the 2% mark, while emerging markets normally face much higher inflation rates. The predicted global inflation rate for 2026 is 4.4%, with the European Union having the lowest rate at 2.8%, followed by the United States at 3.2%, and emerging markets and developing economies at 5.5%. Although the European Central Bank and the Federal Reserve, following the post-pandemic highs, have taken measures to moderate inflation and decrease its volatility, due to the consecutive wars, this year's predictions showed again an increasing trend compared to 2025 and still above pre-pandemic values. This geopolitical uncertainty that drives up inflation then forces interest rates to be increased and to be kept at higher rates, with a 25 basis points increase made by the European Central Bank in their last meeting (11/06/2026)

(Weisbach, 2026). Therefore, it is important to include alternative investments in the portfolio since these are inflation-resistant assets.

Global financial markets are increasingly making capital allocation choices based on sustainability concerns. Sustainability is not an ethical preference anymore and it is now treated as a driver of economic activity and growth. Sustainable investment in industries such as infrastructure and electrification is expected to rise, due to an increasing demand for energy efficient and clean energy solutions, following the pattern drawn in the past years up to now. Investors are shifting their capital towards companies that are able to provide financial return while their main activity will create a sustainable impact in the long-term. This forces them into improving their ESG performance, by integrating these metrics in their corporate strategy.

According to the BloombergNEF's Energy Transition Investment Trends report, these investments are uneven between regions, but all show a positive trend. With 47% of all investments worldwide in 2025, Asia Pacific continued to be the biggest investment area. Although the amount invested dropped 4% when compared to 2024, in 2025, China continues being the largest investor in energy transition, accounting for \$800 billion, around 34% of the global investment (BloombergNEF, 2026), followed by the European Union-27 and the United States, far behind with \$455 billion and \$378 billion, respectively.

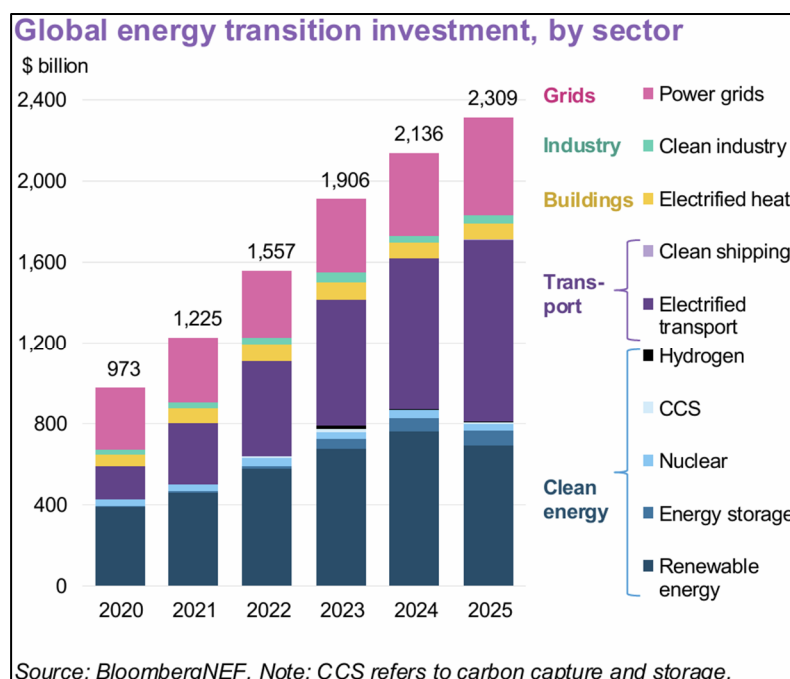


Figure 2 - Global energy transition investment, by sector

Source: BloombergNEF

4.3 Strategic Asset Allocation

The Strategic Asset Allocation (SAA) of this fund takes into account the medium/ long-term horizon of the investment and its moderate risk level. It also considers CARE's mission and the need to find assets that are in line with ESG values, more specifically social ones. The SAA is a strategy that involves choosing target proportions for asset classes and it is dependent on the time horizon, return goals and risk tolerance of the investor. It will be defined so the portfolio respects the moderate risk profile of CARE, as well as, controlling volatility while balancing growth.

Considering the particular investment objective of CARE, an equity-oriented strategy was considered the most appropriate. Therefore, the portfolio will have between 70% and 80% of exposure to equities, between 10% and 15% to fixed income and between 10% and 15% to alternative investments, namely precious metals and real estate.

The 10-year time horizon allows the portfolio to adopt a riskier approach, where equities represent the biggest portion of the portfolio, between 70% and 80% exposure. These securities provide a reliable risk-adjusted return and support the strategy of the portfolio. Literature confirms that longer time horizons allow for a more daring strategy given the fact that there is more time for eventual losses to be recovered in the presence of market fluctuations (*Chladek, 2021*). Moreover, equities capture economic expansion and are the main source of long-term capital gains.

The fund may withstand intermediate volatility more easily than an investment needing yearly dividends given that the investment horizon is known ahead of time, that withdrawals are not necessary, and also that any income, interest, or realized capital gain from the investment will be reinvested. Therefore, the requirement for liquidity is not considered a problem for this investment since it will not be needed in the meantime.

The equity allocation is also expected to achieve a significant level of diversification by itself. This is possible through the exposure to different geographic regions in both developed and emerging markets, but also by investing in a variety of sectors and industries, allowing the portfolio to profit from several sources of economic growth.

The fixed income allocation used in the portfolio, between 10% and 15%, is justified by the need for a stabilizer and a risk-control instrument. Fixed income securities provide stability by decreasing volatility while increasing portfolio diversification, important

specially during equity downturns. However, given that the main objective is to maximize long-term risk-adjusted returns, the percentage is kept to a minimum strategic weight. Furthermore, because of the portfolio's already wide diversity across global equity holdings, its diversification effect is diminished.

To increase the portfolio's diversification and hedge against inflation, the portfolio will have exposure to alternative investments between 10% and 15%, namely to the precious metals market. This particular market is expected to have a strong and steady growth over the next few years, with gold keeping its dominance, along with other metals such as silver and platinum following the trend and seeing strong gains. The portfolio will also be exposed to the real estate market, since this market has historically low correlation with other asset classes, offer inflation protection and it is also expected to have a sustained growth over the next few years. Moreover, by keeping the percentage at around 15%, the illiquidity risk is decreased.

In addition to the value creation strategy, the portfolio incorporates strong Environmental, Social, and Governance (ESG) criteria. These considerations are not treated as a separate objective, instead they are integrated into the security selection process in order to align long-term financial performance with sustainable growth.

This is accomplished by constructing a two-part portfolio. The first portion only includes ESG-oriented securities and serves as the foundation of the investment strategy, ensuring that sustainability considerations remain at its core. The second portion includes investments such as conventional market exposures and alternatives, used to increase portfolio efficiency, lower concentration risk and balance volatility.

4.4 Management Structure

The management team will adopt an active investment approach to manage the portfolio. Although a passive approach would allow for savings in transaction costs, for example, the fund believes that direct management by an internal team will add value through security selection and risk management skills, given that these areas are not as efficient when solely relying on the market. Under this structure, the team will manage the fund directly, under the supervision and mandate of the Investment Committee and the Chief Investment Officer.

The internal management process will use a due-diligence framework centred on ensuring that the ethical values and day-to-day operations are aligned with CARE's mission and that the team understands the specificities behind an investment of this nature. The team needs to show an investment philosophy that is aligned with the purposes of the portfolio and stability of its investment team. It is also important to demonstrate a strong capacity to manage portfolios with different asset classes, as well as finding a way to balance financial and non-financial objectives.

It is also extremely important that the team is familiar with ESG investing principles and has experience in selecting and monitoring this type of securities. They should be able to identify specific risks but also return opportunities related to sustainability-oriented securities, along with understanding ESG rating methodologies and corresponding data. In summary, it is crucial to know how to include ESG factors into the investment process while maintaining the portfolio's alignment with its long-term financial goals.

The internal operating cost structure must be competitive and must also ensure net value creation. As mentioned above, the fund believes that active management is the best choice and expects that the excess returns brought by this approach and by the management team will compensate the associated costs.

In terms of benchmarking, the MSCI ACWI Index was selected as the appropriate portfolio benchmark. It captures large and mid-cap representation across developed markets and emerging markets, providing exposure to the global market. Although a custom benchmark would be considered more suitable to accommodate the investments in fixed income and alternative investments, this index was chosen for simplicity and consistency as equities represent the largest percentage of the portfolio and more closely replicate the source of both return and risk. Therefore, this index is considered an appropriate benchmark to assess the overall investment performance and the efficacy of the management team and its choices.

The management team will be monitored quarterly by the Investment Committee to ensure the Investment Portfolio Statement and the Strategic Asset Allocation are being complied with but also doing a correct and efficient implementation of the investment strategy tailored to CARE's objectives.

4.5 Security Selection

The security selection was made by focusing on which investment vehicles, asset classes and securities would better fit the investment and risk profile of CARE. The asset classes chosen were equities, bonds and alternative investments, following the SAA defined above.

As previously mentioned, in order to meet both the financial and social and environmental impact objectives, the portfolio is divided into two parts. The part focused on the ESG objectives, the ESG-oriented portfolio, will be constituted by equities and ETFs of equities and fixed income. The Exchange-Traded Funds (ETFs) are essential to the portfolio since they allow the investor to have a bigger exposure to markets and geographical areas that otherwise would be difficult to replicate through the selection of individual securities, as well as they facilitate the investment in more specific asset classes such as social and green bonds. The use of this instrument helps reduce concentration risk while guaranteeing a significant market coverage by exposing the portfolio to a range of underlying assets from both emerging and developed economies. This allows for a great diversification while keeping the portfolio structure more manageable with a lower number of securities. Moreover, ETFs increase the liquidity and transparency of the portfolio. Therefore, there were selected three ESG aware equity ETFs, three ESG related bond ETFs, one of which focused on green bond investing, and one other equity ETF focused on socially responsible investments.

Regarding equities, the decision to include individual securities comes from the need to complement the market exposure provided by the ETFs and to enhance the ESG profile of the portfolio, specifically its social dimension. This need stems from the nature of the “Water +” project and its objectives. While environmental considerations are easier to address through a range of sustainable and climate-focused securities, it might be more challenging to find investments that align and reflect the social mission of the project. Therefore, individual equities with good social pillar scores are the way to provide targeted exposure to these types of securities. The companies chosen, between eight and ten different ones, will need to have an ESG Social pillar score higher than 9, in the Bloomberg scale, to ensure they provide an excellent social factor performance. Only these stocks are to be considered as possible investments and are to be selected from various markets.

This approach allows for a tighter control over the ESG requirements of the fund that wouldn't be possible with other types of financial products. In this manner, the fund's objective is fulfilled, and it also serves as a means of supporting companies whose operations align with the social principles that CARE promotes.

With the social requirements secured by the ESG-oriented portfolio, the second portion, the “traditional portfolio”, will be focused on improving the overall risk adjusted return of the portfolio to complement the sustainability focused allocations.

The alternative investments portion of the portfolio will be included in the traditional portfolio and will also be made through ETFs. For the two particular markets in which the portfolio will hold positions, real estate and precious metals, this approach allows for a more efficient access with lower costs. As mentioned above, ETFs bring diversification benefits to the portfolio as well as allow to maintain higher levels of liquidity, especially in these markets. Moreover, the preference was given for these two markets and not other types of alternative investments since they are less volatile, provide higher returns and they are expected to continue their current growth path over the next few years.

With regard to real estate, ETFs allow exposure to a larger portion of the market without the limitations associated with direct ownership, such as operational constraints. Similarly, precious metals ETFs offer access to the market without the storage, transaction or transportation costs associated with the physical holding.

For the precious metals ETF, the choice was made among Gold ETFs. This metal was chosen due to its historical role as a safe-haven asset and lower correlation with the market. This characteristic comes from the fact that gold is not as dependent on industrial demand when compared to other metals making it less sensitive to market fluctuations, helping during inflation highs or periods of financial stress. Considering that the main goal of investing in this type of alternative is to mitigate risk and increase diversification of the portfolio, gold is the most suitable choice.

For the remaining of the traditional portfolio, some other ETFs were chosen to cover the equities and bonds market, both geographically and sector-wise. As mentioned before, these instruments help expand the exposure of the portfolio while keeping risk at a lower level and increasing liquidity. Therefore, three equity ETFs and two bond ETFs will be selected to improve portfolio risk-return balance.

4.6 Portfolio Composition

Considering the previously established Strategic Asset Allocation and the criteria presented for the security selection of all asset classes in the portfolio, the next section consists in the implementation of the strategy for the selection of individual securities and the following optimization.

To select the proper equities following the constraints already mentioned, the Bloomberg security screener was used. Firstly, all industries identified in section 3.4 as controversial were excluded from the selection using the Bloomberg screening filters. Then, a second filter was added to only show equities with a Bloomberg ESG Social pillar score higher than 9. These securities were then ranked according to this score from highest to lowest. Moreover, to ensure geographic diversification, the companies were divided by regions allowing to pick securities from several markets.

The historical data used in the analysis was extracted from Bloomberg. Total Return Index was used as the appropriate price function, as it considers that all dividend payments are reinvested in the portfolio. As this is the proposed strategy for this investment, the Total Return Index was the appropriate function to use, since it represents better the returns the investor might expect.

The data was collected as monthly observations, in Swiss francs (CHF), for a period of roughly ten years, spanning from December of 2016 to May of 2026, comprising a total of 114 observations per security. Some securities have less data available since they were only issued later, mostly during the second half of 2018.

After the data collection was completed, the methodology developed by Markowitz, in 1952, regarding Modern Portfolio Theory, was followed to find the optimal portfolio. This theory emphasized the fact that investors should not assess investments solely based on the assets' expected return and should instead take into account how they interact with each other within a portfolio, highlighting the benefits of diversification. The optimization process aims to determine the combination of assets that offers the best possible risk-return outcome, by identifying the optimal weights for each security present in the portfolio.

The calculation of the portfolio returns was conducted in Excel unlike all the other calculations necessary throughout the optimization process that were made using python

code. To get the historical returns of each security, since the data extracted is already in the format of an index, the average monthly return of each security was calculated by doing the percentage change for all the periods in the time interval selected, followed by the average of those results. Since the returns were monthly, they had to be annualized by multiplying the monthly results by 12. The average annualized return of all securities is 9.7834% with the highest return being showed by Longwell Company (6290 TT Equity), and the lowest return by iShares € Corp Bond ESG SRI UCITS ETF (SUOE LN Equity). The corresponding values are showed in the table below.

Annualized Returns	
Average	9.7834%
Highest	41.5490%
Lowest	-1.8852%

Table 1 - Annualized Returns

These results match with the strategy of the portfolio and the fact that bond returns have suffered historic losses during the interest rate highs in 2022.

According to Markowitz (1952), portfolio risk is determined by the volatility of each asset but also by the correlation between them, so it is important to compute the variance, standard deviation and variance-covariance matrix. These calculations were already performed using python, which applied the corresponding functions to the monthly returns already calculated in Excel. Similarly to returns, the values also need to be annualized. The average annual variance is 8.6345%, and the square root of that gives an average annual standard deviation of 23.5901%. The variance-covariance matrix was then computed but, due to the lack of space, it is not presented here.

The portfolio optimization process was applied through the maximization of Sharpe Ratio. The Sharpe Ratio framework, developed by William F. Sharpe in 1966, was an expansion of the Modern Portfolio Theory. It measures the excess return generated by a portfolio above the risk-free rate per unit of risk taken. It is computed by dividing the difference between the risk-free rate and the expected return of the portfolio by the standard deviation of the portfolio. The risk-free rate used was the Switzerland 10y bond, at the time taken with a value of 0.411%, annually. For simplicity reasons the risk-free rate used will be considered constant over time, although for accuracy it should be the average yield of the 10-year Switzerland bond over the 114 monthly observations used in the study.

The initial objective was to incorporate ESG constraints into the optimization process. Following the approach used by Lasse Heje Pedersen et al. (2018) in *Responsible investing: The ESG-efficient frontier*, the primary idea was to collect the ESG score for all securities and set a constraint for the score to be above a certain value, creating an ESG-efficient frontier. With this method, the fund's financial and ESG objectives would be simultaneously considered, and the optimal portfolio would be found through the balancing of the two goals. However, due to lack of consistent ESG data regarding some of the securities in the investment universe, it was not possible to implement this mechanism. Therefore, the alternative found was a two-step optimization approach.

The two-step optimization methodology is a method where a part of the portfolio is optimized first followed by the inclusion of the remaining securities that are then subject to optimization, with the portion of the portfolio already optimized acting as a single security. This methodology was used not only as a technical optimization choice but mainly as an asset allocation framework. In this case, by conducting the optimization of the ESG-oriented portfolio first, it is ensured that the ESG requirements are automatically met and the only concern is to maximize the Sharpe Ratio, preventing that a higher percentage is allocated to non-ESG assets if optimized all together. Only after, the optimized ESG portfolio is combined with the remaining securities, and a second optimization is performed to obtain the final portfolio composition. This approach was considered more suitable because it reflects the CARE's objectives, constraints, and mandate.

As an additional measure to preserve the sustainability of the fund, a minimum weight constraint for the ESG-oriented portfolio was set, stating that this portion of the investment will need to represent at least 60% of the total portfolio allocation. As a robustness test, a single optimization with a minimum weight constraint for the ESG-oriented portfolio will be conducted after the 2-step approach. This will help understand whether the portfolio is sensitive to the construction method used.

The optimization problem was subject to some other constraints, in order to preserve the investment objectives and the strategy defined by the fund. Firstly, the sum of the weights of all securities had to be 100%, meaning the capital available was fully invested. Secondly, all securities have a maximum weight constraint of 10% and minimum weight of 1%. The maximum weight restriction wants to ensure diversification and limit excessive concentration in any single position. On the other hand, the minimum weight

restriction wants to ensure that all assets have a certain percentage allocated to them, even the ones whose primary goal is diversification and not necessarily return generation. This constraint is particularly relevant to surpass the problem caused by fixed income securities generally having lower expected returns when compared to equities. The latest asset class would be favoured while bonds would have much lower allocations if the optimization was done without this constraint.

Because the optimization is done in a two-step approach, some of the securities of the ESG-oriented portfolio will end up with a percentage lower than 1% in the final portfolio allocation. This happens because the minimum weight constraint is applied to each optimization separately, and as a result, after the second optimization, some securities may end up with a minimum percentage closer to 0.77%.

To comply with the allocation intervals for each asset class defined in the Strategic Asset Allocation, those intervals were used as minimum and maximum weight constraints. Therefore, the sum of all equities had to represent between 70% and 80% of the portfolio, fixed income securities needed to have between 10% and 15% of exposure, and alternative investments had to be at least 10% and at most 15% of the portfolio. The Efficient Frontier (EF) obtained after the optimization is a Constrained EF, since it is constrained to all the minimum and maximum weight allocations mentioned above, either for asset classes, individual securities or sets of securities.

Moreover, the portfolio does not allow short selling. However, there was no need to include more constraints given that the minimum weight also ensures that the weights of the securities are non-negative and only long positions are taken.

With the expected annual returns and volatility already calculated, it is now possible to conduct the optimization, by maximizing the Sharpe Ratio and finding the Tangency Portfolio, but also by minimizing volatility and obtaining the Minimum Variance Portfolio (MVP). The MVP represents, for a given investment universe, the combination of assets that results in the portfolio with the lowest possible volatility, prioritizing the minimization of risk. The calculation of this portfolio is important to assess whether the decrease in volatility is sufficient to compensate the decrease in return, when compared to the Tangency Portfolio.

From this data, together with the calculation of the Capital Market Line (CML), the following graph of the Constrained Efficient Frontier (CEF) with the Tangency Portfolio

and the MVP was obtained. The maximum Sharpe Ratio portfolio is expected to have a return of 15.4057% with a volatility of 14.7862%, resulting in a Sharpe Ratio of 1.0141, while the Minimum Variance Portfolio has an expected return of 13.1613% and a volatility of 13.1959%.

It is important to note that the optimized portfolio is only in-sample optimal and may not remain optimal out-of-sample. Estimation error can significantly weaken realized performance, especially because historical returns were used to estimate expected returns and volatility, both of which are inherently noisy.

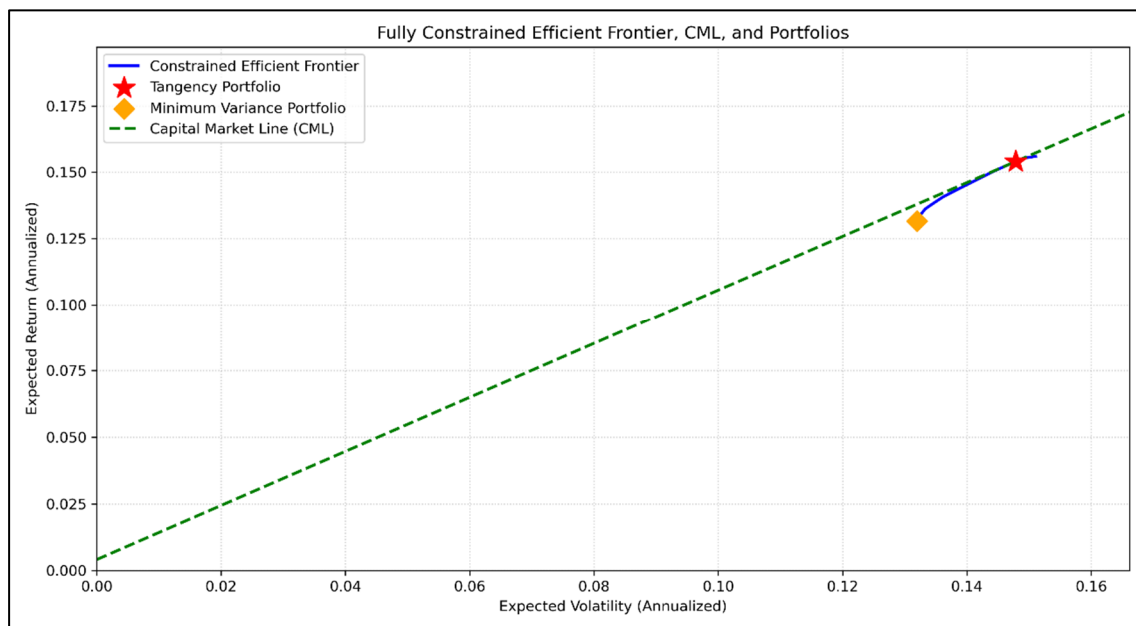


Figure 3 - Fully Constrained Efficient Frontier, CML, and Portfolios

Considering that both portfolios exceed the annualized expected return, the decision on which portfolio to choose for the optimal allocation will rely on the risk profile of the investment, and the metrics defined for the risk tolerance of this portfolio. The IPS requires the fund to maintain an annualized volatility between 10% and 15%, however both portfolios comply with this criterion.

The MVP portfolio, when compared to the Tangency Portfolio, is only able to decrease expected volatility in about 1.6 percentage points, while the expected return decreases in more than 2.2 percentage points. Therefore, the additional risk taken by the Tangency Portfolio is compensated by the increase in expected return, resulting in a more efficient

portfolio and making it the appropriate choice for the optimal portfolio. The weight allocations can be found in the appendix, Table A 1.

From the optimization results, some conclusions can be drawn that are in line with the expectations from the Strategic Asset Allocation. The minimum weight constraint set for the ESG-oriented portfolio ended up not being necessary, considering that the allocation for this portfolio is higher than the 60% set in the constraint (76.59%). This comes from the fact that the Tangency portfolio gives priority to assets that increase the expected return of the portfolio, such as equities, which are the main constituents of the ESG-oriented portfolio.

Gold reached the maximum possible weight during optimization. This is aligned with the expectations of the SAA, mainly due to the steady growth this precious metal has had in the past years that is expected to prevail, together with its historically low correlation with other asset classes and resilience during crisis periods.

On the other hand, fixed income securities were allocated with smaller percentages, just enough to comply with the minimum weight constraint for the asset class. These percentages reflect the lower contribution fixed income has to increase Sharpe Ratio, although they are extremely important to balance volatility and decrease the portfolio's risk.

As mentioned before, a single optimization with a minimum weight constraint for the ESG-oriented portfolio would be conducted as a robustness test, to verify if the portfolio is dependent on the method used for its optimization. Keeping the constraints for the asset classes' weights, the minimum and maximum allocations to each security and the minimum weight constraint on the total allocation to ESG assets, the maximum Sharpe Ratio portfolio showed results not far from the one obtained with the 2-step approach. The portfolio presented a slightly higher annualized expected return and a higher annualized expected volatility, resulting in a small improvement of the Sharpe Ratio. However, the concern expressed before regarding a possible misplacement of higher percentages being allocated to non-ESG assets if the assets were to be optimized all together materialized. The total percentages per asset class remain the same across all three classes (Table A 2), but the percentage allocated to the previously called ESG-oriented portfolio decreased in almost 7%. Therefore, although the 2-step optimization cannot be considered superior mathematically, it is the most appropriate for the context

of this investment, preserving CARE's objectives and social and environmental concerns. The result of both optimizations with the corresponding values can be found in Table A 3.

4.7 Monitoring

The monitoring of the portfolio performance will be made quarterly by the Investment Committee and compared against the benchmark for this portfolio, the MSCI ACWI Index, under the guidelines of the Chief Investment Officer (CIO) and the Chief Risk Officer (CRO).

The benchmark will be used to assess not only the absolute returns of the portfolio but also the risk-adjusted returns. This analysis will help measure if the risk taken by the portfolio is being compensated and if the active management approach used contributes positively when compared to the passive management approach represented by the benchmark. Given the sustainability nature of the investment, the Investment Committee will also monitor the ESG characteristics of the fund to make sure the requirements established in this IPS are being met. Due to lack of data, it will not be possible to measure the ESG profile of the portfolio against benchmark.

The CRO will be responsible for ensuring the risk limits and tolerances are being respected and will issue quarterly reports regarding the several types of risk the portfolio might face. The CRO must also report any deviations from the SAA or any other guidelines in this policy statement.

A meeting to analyse whether the rebalancing of the portfolio is needed or not will happen quarterly, to ensure the limits imposed by the SAA are being respected, and if not, to realign the portfolio weights with the strategy. However, if the market happens to be under unusual stress or if there are significant changes that justify a temporary deviation from the SAA, the CIO might allow for a rebalancing to happen without the meeting, enabling the portfolio to adapt to the market conditions.

Additionally, the SAA will be reviewed on an annual basis. This review will allow to verify whether the objectives set by the IPS remain adequate for the market conditions being faced at the time as well as the circumstances faced by CARE. If any modifications are done, they need to be reported to and approved by the Investment Committee.

During these rebalancing meetings, assets might be removed from the security selection if they no longer meet the criteria established in this IPS. Reasons for being removed include a decrease in ESG score below the established threshold for the equities in the ESG-oriented portfolio, a deterioration of financial quality, material changes in management or industry classification, rebalancing purposes, or loss of alignment with the ethical standards and mission of CARE.

4.8 Risk Analysis

Risk analysis is a fundamental part of the IPS. It provides a forward-looking assessment of the portfolio's risks as well as their likelihood and scale and how the portfolio will react to certain events of the market. The metrics used for the analysis include Value at Risk (VaR) and Expected Shortfall (ES) as well as a Monte Carlo simulation of the future returns of the portfolio and a risk matrix. These metrics provide a complete assessment of the portfolio's risks and were calculated using python code.

The Value at Risk is a measure used to quantify risk and potential losses, in this case, of a portfolio over a specific period. It has an easy interpretation and allows for comparison between asset classes, making it a widely used variable. However, it has disadvantages such as ignoring the size of the losses beyond the VaR threshold. For that reason, it is common and important to complement the analysis with the Expected Shortfall metric. This measure of risk quantifies the average loss of the portfolio in the worst-case scenarios, meaning, in the cases beyond the VaR threshold, allowing to quantify the severity of the losses. While VaR measures how much the loss can be, the ES measures how much that loss can be on a bad day. It has a more conservative approach, useful to analyse and manage the extreme scenarios. Both of these measures were calculated using 3 different approaches: Historical, Parametric (Variance-Covariance) and Monte Carlo.

The Historical VaR uses the historical returns of the securities to simulate the losses, Parametric VaR assumes the returns are normally distributed and uses the portfolio's volatility instead, and the Monte Carlo simulation VaR generates thousands of random price paths and reevaluates the portfolio under each scenario. This method is considered the most flexible and robust for complex portfolios. The calculations performed assumed a 95% confidence level, monthly data and an initial value of 1 million Swiss francs. The following results were obtained.

Value-at-Risk	
Confidence Interval	95%
Historical VaR	5.0357%
Parametric VaR	5.7214%
Monte Carlo VaR	5.7283%

Table 2 - Value-at-Risk

The results of all three methods being close to each other increases trust in the accuracy of the portfolio's downside risk estimate, specially since they are all based in different assumptions. Therefore, there is a 5% probability that the portfolio will incur in a loss greater than 5.7283% of the portfolio value in a single month.

To gain a better understanding of the tail risk faced by the portfolio, the Expected Shortfall was calculated next. The same 95% confidence level was used for the ES, and the following results were obtained.

Expected Shortfall	
Confidence Interval	95%
Historical ES	7.4351%
Parametric ES	7.5061%
Monte Carlo ES	7.5060%

Table 3 - Expected Shortfall

Once again, the results are similar to each other, confirming the conclusion drawn previously. The risk profile of the portfolio is relatively indifferent regarding the choice of methodology which supports the robustness of the estimated loss.

While VaR and ES focus on the magnitude of possible losses, they do not give the full picture of what the portfolio outcomes might be. Therefore, to complement these two measures, a Monte Carlo simulation was performed to estimate the distribution of the returns over the next 12 months.

For an initial Assets under Management (AUM) amount of 1 million Swiss francs with 100,000 different scenarios, the results estimated were the following.

Monte Carlo Simulation 12 months	
Average	1,168,675.78 CHF
Median	1,155,630.10 CHF
Bottom 5% Worst-Case Scenario	906,199.55 CHF
Top 5% Best-Case Scenario	1,474,738.39 CHF

Table 4 - Monte Carlo Simulation 12 months

In the 5% worst scenarios, the portfolio value registers a loss of almost 8%, while in the 5% best scenarios it shows a possible gain of 47%. Together with the result for the median and the average outcomes, these results are consistent with the value creation strategy implemented by the portfolio.

A second simulation was conducted to estimate the same results but for a five-year period. This time horizon was considered appropriate to perform a medium-term analysis and understand if the portfolio can sustain its expected risk-return characteristics over a longer investment period. Although the time horizon of the portfolio totals for ten years, it was considered an excessively long interval to perform a Monte Carlo simulation. A 10-year period would increase the uncertainty associated with the assumptions regarding expected returns and volatilities. Therefore, the following results regarding a Monte Carlo simulation for a 5-year period with 100,000 paths were obtained.

Monte Carlo Simulation 5 years	
Average	2,184,019.26 CHF
Median	2,067,851.43 CHF
Bottom 5% Worst-Case Scenario	1,200,317.15 CHF
Top 5% Best-Case Scenario	3,562,320.00 CHF

Table 5 - Monte Carlo Simulation 5 years

Overall, the simulation shows that the portfolio is likely to have a strong growth over the next five years. Both the median and the average have high outcomes, which combined with the low probability of a poor performance showed by the result obtained in the worse 5% scenarios, suggest that the portfolio strategy is sustainable and the risk level assumed by the fund is consistent with the long-term objectives.

Since the objective of the portfolio is not only to optimize returns but also to add value through an active management approach, it is important to compare the portfolio's performance with the benchmark defined in this IPS, given that it represents the passive management approach. Below can be found a table that compares the annualized return,

volatility and Sharpe Ratio of the MCSI ACWI Index with the same measures of the optimal portfolio.

	MSCI ACWI	Optimal Portfolio
Annualized Expected Return	11.23%	15.41%
Annualized Expected Volatility	15.34%	14.79%
Sharpe Ratio	0.7054	1.0141

Table 6 - Performance relative to benchmark

The optimal portfolio achieved an annualized expected return considerably higher than the one of the benchmark. Moreover, this was accomplished while slightly decreasing volatility, resulting in a portfolio with a better risk-adjusted performance as it is showed by the Sharpe ratio value.

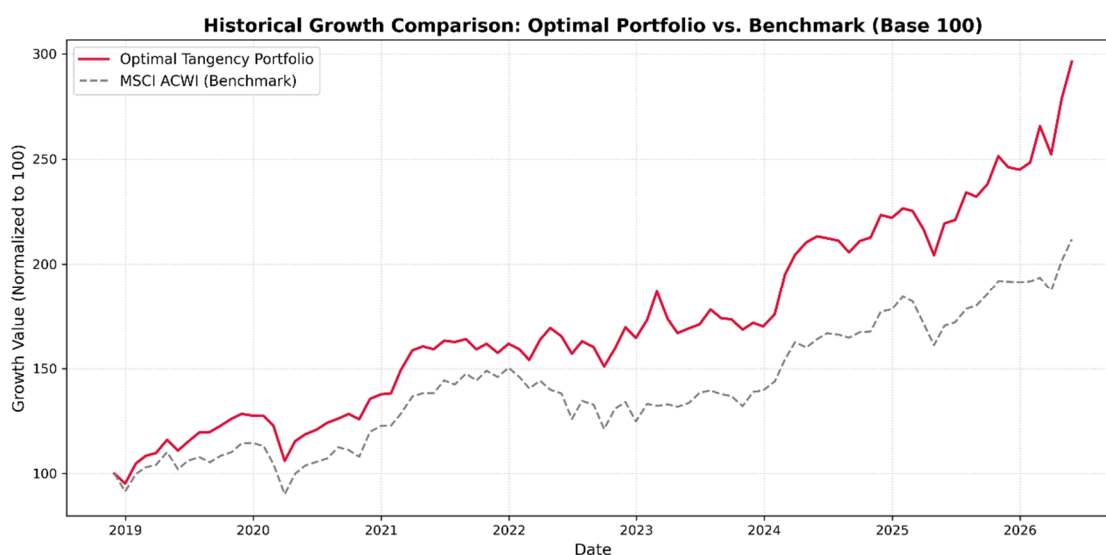


Figure 4: Historical Growth Comparison of Optimal Portfolio vs Benchmark

Together with the historical growth comparison in the graph above, it is possible to conclude that the active management approach implemented by the management team was successful and resulted in the outperformance of the benchmark by the optimal portfolio.

It is important to also analyse what types of risks the portfolio is exposed to, their likelihood and their impact if the risk materializes. That can be done through a qualitative risk matrix. Both the probability and the impact will range from low to high, high meaning the risk with almost certainly will materialize and its consequences are severe. The risks that might affect the portfolio are the following:

- **Equity Market risk:** With a considerably high percentage of the portfolio allocated to equities, a global market downturn would cause a severe negative impact on the portfolio value. By diversifying across regions and sectors, the impact is expected to be mitigated.
- **Currency risk:** The portfolio has investments worldwide, therefore, it is exposed to several currencies. Currency fluctuations can affect returns, but with continuous monitoring the effect is hoped to decrease.
- **Interest rate risk:** Since the portfolio has a low exposure to fixed income, but the volatility of the rates is still high, it is important to acknowledge this potential risk.
- **ESG risk:** ESG score decreases and greenwashing concerns are some of the risks regarding ESG the portfolio might face. The mitigation of these risks includes regular monitoring, ESG screening and minimum score requirements.
- **Reputational/ Mission Alignment risk:** This risk is related to the possibility of the investment structure having a misalignment with the organization's ethical responsibilities. Although this risk has a low likelihood of happening, if it does, it has a high impact on the NGO's reputation and on the trust of donors and investors.
- **Liquidity risk:** The use of highly liquid ETFs and equities decrease the probability of this risk occurring.
- **Regulatory risk:** changes in ESG regulation are happening relatively often. It is important to do constant monitoring.

The Risk Matrix of the CARE International Fund is presented below.

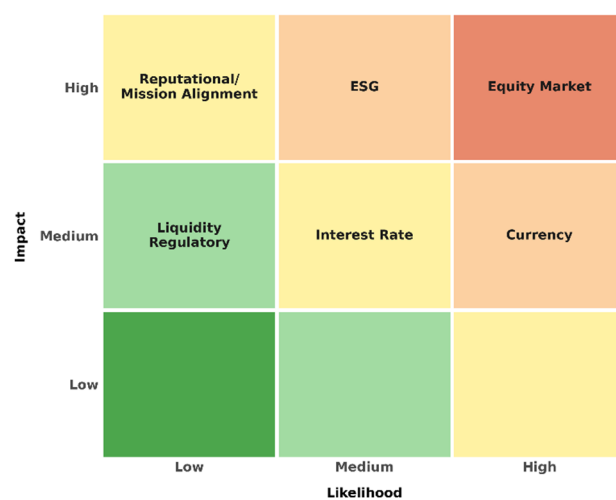


Figure 5 - Risk Matrix

5. Investment Policy Proposal

This IPS provides a clear and detailed framework for a cautious management of CARE's funds. It requires that the investment strategy and philosophy of the management team are aligned with CARE's mission and with the purpose of the investment. This proposal is a formal recommendation to the Board and will wait on its approval.

The Strategic Asset Allocation points to a value creation approach with a strong incorporation of ESG requirements, ensuring both the long-term financial growth needed to support the implementation of the "Water +" project as well as the mission driven characteristics required by CARE.

Based on the macroeconomic analysis conducted, the Board should approve this strategy, since it respects the time horizon of the investment, the risk tolerance of CARE, and the constraints imposed by the organization regarding ESG considerations. The proposed policy ensures a transparent and mission-aligned asset management, with clear risk metrics and governance structures.

Through the adoption of this policy, the Board makes the commitment to safeguard CARE's assets and to make them grow in value, allowing the organization to continue its purpose through an effective and successful implementation of the "Water +" project.

References

- Blended finance*. (n.d.). PUBLIC-PRIVATE-PARTNERSHIP LEGAL RESOURCE CENTER. Retrieved June 4, 2026, from <https://ppp.worldbank.org/blended-finance>
- Blended Finance | Convergence*. (n.d.). Retrieved June 4, 2026, from <https://www.convergence.finance/blended-finance>
- BloombergNEF. (2026). *Energy Transition Investment Trends 2026*.
- CARE. (2025, April 16). *She's SMART: Water Smart Agriculture Program - CARE*. Retrieved June 4, 2026, from <https://www.care.org/our-work/food-and-nutrition/water/shes-smart-water-smart-agriculture-program/>
- CARE. (2025b, December 29). *CARE Financial Reports and Information - CARE*. <https://www.care.org/financial-reports/>
- CARE. (2026, February 13). *Who we are - Saving lives, defeating poverty - CARE*. <https://www.care.org/about-us/who-we-are/>
- C.F.I. (2025, February 9). *Strategic Asset Allocation (SAA)*. Corporate Finance Institute. Retrieved June 4, 2026, from <https://corporatefinanceinstitute.com/resources/career-map/sell-side/capital-markets/strategic-asset-allocation-saa/>
- Chladek, N. (2021, July 29). *Understanding time horizons of alternative investments*. Harvard Business School. Retrieved June 4, 2026, from <https://online.hbs.edu/blog/post/investment-time-horizon>
- Cornell, B. (2020). ESG preferences, risk and return. *European Financial Management*, 27(1), 12–19. <https://doi.org/10.1111/eufm.12295>
- D’Incau, Mercusa, Wijeweera, & Zoltani. (2022, April 25). *Identifying the ‘greenium.’* United Nations Development Programme. Retrieved June 4, 2026, from <https://www.undp.org/blog/identifying-greenium>
- Finma, E. F. (2024, June 12). FINMA guidance on operational risk management by fund management companies and managers of collective assets. *Eidgenössische Finanzmarktaufsicht FINMA*. <https://www.finma.ch/en/news/2024/06/20240612-m-am-04-24-op-risk-fondsleitungen/>

Flammer, C., Giroux, T., & Heal, G. M. (2025). The Economics of blended Finance. *AEA Papers and Proceedings*, 115, 397–402. <https://doi.org/10.1257/pandp.20251072>

Frm, R. O. C. (2026, March 30). *VAR methods compared: parametric, historical & Monte Carlo*. Ryan O'Connell, CFA. Retrieved June 4, 2026, from <https://ryanococonnellfinance.com/var-methods-comparison/>

Funds. (2025, September 29). Robeco.com - the Investment Engineers. <https://www.robeco.com/en-int/products/funds?6NoVM9zTITUKEaNyZBVAI3=1qx7NSfpeRDY5dDmJmwwiT>

ICMA. (2016). *SOCIAL BONDS - GUIDANCE FOR ISSUERS*. https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/SBG_June-2016_Final-160616.pdf

IEEFA. (2024). *ESG Investing: Steady growth amidst adversity*. https://ieefa.org/sites/default/files/2024-06/IEEFA%20Report_ESG%20Investing%2006.2024.pdf

International Monetary Fund. (2026). *WORLD ECONOMIC OUTLOOK: GLOBAL ECONOMY IN THE SHADOW OF WAR*.

Kidd, D. & CFA INSTITUTE. (2012). Value at risk and conditional value at risk: A comparison. In *CFA INSTITUTE* (p. 1). <https://deborahkidd.com/wp-content/uploads/Value-at-Risk-and-Conditional-Value-at-Risk-A-Comparison-1.pdf>

Lasse Heje Pedersen, Shaun Fitzgibbons, & Lukasz Pomorski. (2018). Responsible Investing: the ESG-efficient frontier. *Journal of Financial Economics*, 142(2), 572–597. <https://doi.org/10.1016/j.jfineco.2020.11.001>

SFDR - What is it? (n.d.). Nordea Funds. Retrieved June 4, 2026, from <https://www.nordeafunds.com/en/sustainability/sfdr-what-is-it>

Sustainable funds post strong returns | Morgan Stanley. (2025, September 8). Morgan Stanley. Retrieved June 4, 2026, from <https://www.morganstanley.com/insights/articles/sustainable-funds-outperform-traditional-first-half-2025>

Technavio. (2025, January 30). *Precious Metals Market Growth Analysis - Size and Forecast 2025-2029* | TechNavio | TechNavio. Technavio, <https://www.technavio.com/>,

All Right Reserved 2025. <https://www.technavio.com/report/precious-metals-market-analysis>

THE EUROPEAN COMMISSION. (2017). COMMISSION DELEGATED REGULATION (EU) 2017/653. In *Regulation (EU) No 1286/2014*.

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION. (2019). REGULATION (EU) 2019/2088 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL. In *Official Journal of the European Union*.

Weisbach, A. (2026, June 11). *Energy prices take center stage as the ECB prepares to decide on rates*. CNBC. Retrieved June 4, 2026, from <https://www.cnbc.com/2026/06/10/ecb-rate-hike-energy-prices-inflation.html>

World Bank. (2024). *Blended Finance: Mobilizing private capital for infrastructure development* [Report].

Appendix

Name	Ticker	ESG Social Score	Optimal Weight
iShares ESG aware MSCI USA ETF	ESGU US Equity	-	7.66%
iShares ESG aware MSCI EM ETF	ESGE US Equity	-	7.66%
iShares ESG aware MSCI EAFE ETF	ESGD US Equity	-	7.66%
iShares ESG Aware U.S. Aggregate Bond ETF	EAGG US Equity	-	1.05%
iShares € Corp Bond ESG SRI UCITS ETF	SUOE LN Equity	-	0.77%
UBS MSCI World Socially Responsible UCITS ETF USD dis	UC44 LN Equity	-	7.66%
iShares USD Green Bond ETF	BGRN UQ Equity	-	0.77%
Ulusoy Elektrik İmalat Taahhüt ve Ticaret A.Ş.	ULUSE TI Equity	10	7.66%
Vestel Elektronik Sanayi ve Ticaret A.Ş.	VESTL TI Equity	10	0.77%
Vestel Beyaz Eşya Sanayi ve Ticaret A.Ş.	VESBE TI Equity	10	0.77%
Carmila S.A.	CARM FP Equity	10	2.78%
Spin Master Corp.	TOY CN Equity	10	0.77%
Eaton Corporation plc	ETN US Equity	10	7.66%
Johnson Controls International plc	JCI US Equity	10	7.66%
Longwell Company	6290 TT Equity	10	7.66%
FuSheng Precision Co., Ltd.	6670 TT Equity	10	7.66%
iShares core S&P 500 ETF	IVV US Equity	-	2.99%
iShares core MSCI emerging markets ETF	IEMG US Equity	-	1.00%
iShares core MSCI EAFE ETF	IEFA US Equity	-	1.00%
iShares Core U.S. Aggregate Bond ETF	AGG US Equity	-	6.42%
iShares Core International Aggregate Bond ETF	IAGG US Equity	-	1.00%
iShares Global REIT ETF	REET US Equity	-	1.00%
iShares Gold Trust ETF	IAU US Equity	-	10.00%

Table A 1 - Portfolio Composition

Asset Class	Minimum	Optimal	Maximum
Equities	70.00%	79.00%	80.00%
Fixed Income	10.00%	10.00%	15.00%
Alternative Investments	10.00%	11.00%	15.00%
Total	-	1.00	-

Table A 2 - Asset Class Weights

	2-step approach	1-step approach
Annualized Expected Return	15.4057%	16.7771%
Annualized Expected Volatility	147862.0000%	15.1899%
Sharpe Ratio	1.0141	1.0774

Table A 3 - Optimization Approaches and Results

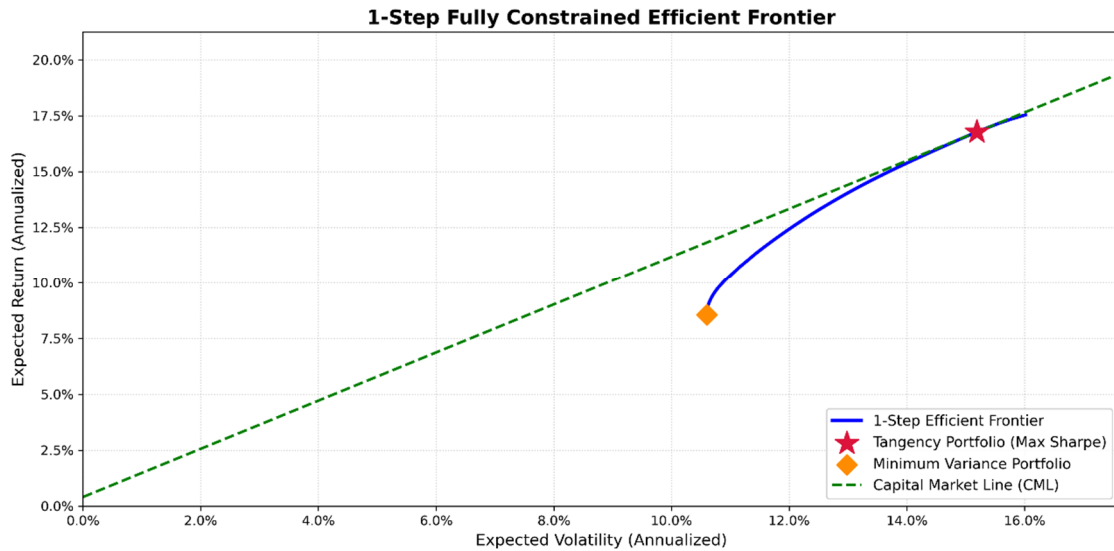


Figure A 1 - Constrained Efficient Frontier 1-step Optimization

	Ann. Return	Ann. Volatility	Sharpe Ratio	Start date	End Date	Months of Data
ESGU US Equity	12.70%	15.60%	0.788	2017-01	2026-05	113
ESGE US Equity	8.16%	15.52%	0.499	2017-01	2026-05	113
ESGD US Equity	7.37%	13.63%	0.511	2017-01	2026-05	113
EAGG US Equity	-1.05%	6.42%	-0.228	2018-11	2026-05	91
SUOE LN Equity	-1.89%	5.99%	-0.383	2018-07	2026-05	95
UC44 LN Equity	9.98%	14.55%	0.658	2017-01	2026-05	113
BGRN UQ Equity	-0.80%	6.80%	-0.178	2018-12	2026-05	90
ULUSE TI Equity	41.12%	67.94%	0.599	2017-01	2026-05	113
VESTL TI Equity	1.75%	53.67%	0.025	2017-01	2026-05	113
VESBE TI Equity	3.77%	46.62%	0.072	2017-01	2026-05	113
CARM FP Equity	8.68%	37.71%	0.219	2017-01	2026-05	113
TOY CN Equity	1.20%	42.17%	0.019	2017-01	2026-05	113
ETN US Equity	21.75%	25.07%	0.851	2017-01	2026-05	113
JCI US Equity	15.66%	26.88%	0.567	2017-01	2026-05	113
6290 TT Equity	41.55%	54.00%	0.762	2017-01	2026-05	113
6670 TT Equity	11.97%	23.45%	0.493	2017-12	2026-05	102
IVV US Equity	12.98%	15.29%	0.823	2017-01	2026-05	113
IEMG US Equity	8.21%	15.14%	0.515	2017-01	2026-05	113
IEFA US Equity	7.47%	13.56%	0.52	2017-01	2026-05	113
AGG US Equity	-0.75%	6.38%	-0.182	2017-01	2026-05	113
IAGG US Equity	-0.30%	7.23%	-0.098	2017-01	2026-05	113
REET US Equity	3.12%	16.47%	0.164	2017-01	2026-05	113
IAU US Equity	12.35%	12.47%	0.957	2017-01	2026-05	113

Table A 4 - Summary Statistics

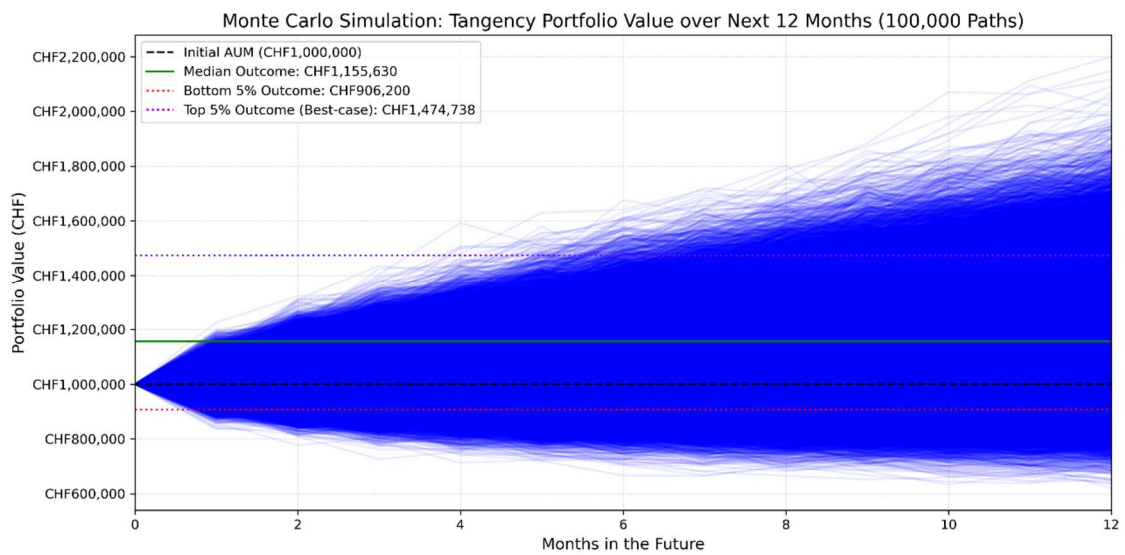


Figure A 2 - Monte Carlo Simulation 12 months

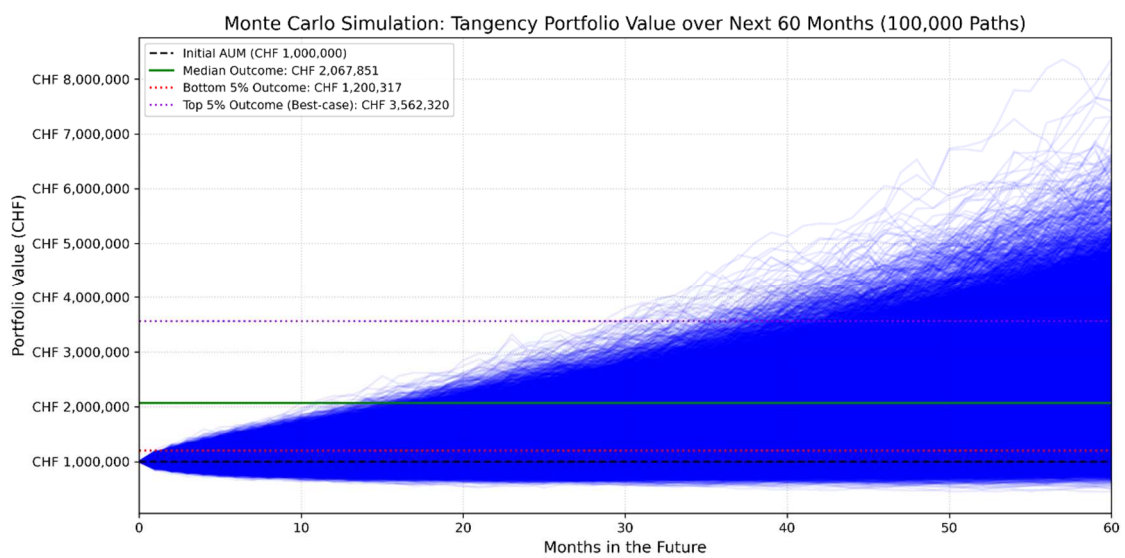


Figure A 3 - Monte Carlo Simulation 5 years

Disclosure and Disclamers

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I disclose that Artificial Intelligence tools, including language models such as ChatGPT, were utilized during the development of this IPS as follows:

- AI-based research tools were used to assist in the literature review and data collection
- AI was used to improve English and grammar
- A generative AI tool was consulted for brainstorming and outlining purposes only
- A generative AI tool was used to write the python code and the citations used in this IPS

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Rita Lucas