Your Investment Performance Report

Overview

Current Wealth:	Goal:	Investment:	Return:	Risk:
€11,606	**€27,000**	**€13,600**	**-3.09%**	**5.15%**

Your Investment Summary

Objective:	Initial Investment:	Monthly Investment:	Investment Horizon:
Saving, Security	**€10,000**	**€100**	**01.01.2015 - 31.12.2024**

Attention! We currently project that **you will not be able to reach your investment goal** of **€27,000** by **31.12.2024**. This is assuming that the expected yearly return will stay constant at -3.09% and the yearly volatility of returns at 5.15%. So far, you have only accumulated **58.0% of your investment goal**. Even in the best case your expected wealth by the end of the investment period will amount to **€21,886, which is still less than your total investment** by that time. We strongly recommend that you inspect the investment report in great detail and **consider making adjustments to your current strategy**.

Your Expected Wealth

Best Case:	Base Case:	Worst Case:	Goal Attained:	Delta:
€21,886	**€16,792**	**€12,889**	**58.0%**	☹

Analysis

Your current strategy and the corresponding investment manager were specifically selected based on your individual investor characteristics (such as your ability and willingness to carry risks) and fitted to your investment goal (i.e., amount & investment horizon).

Below you can compare your investment strategy's historic (last year & lifetime) performance to a benchmark with similar investment parameters. As you can see, the **benchmark has consistently outperformed your investment strategy**. This also resulted in **significantly worse Sharpe and Omega Ratios** for your strategy.

Criterion	Your Strategy	Benchmark
Return	-3.09%	5.6%
Risk	5.15%	7.9%
Sharpe Ratio	-0.72	0.63
Omega	0.97	1.21

Lifetime

Last year
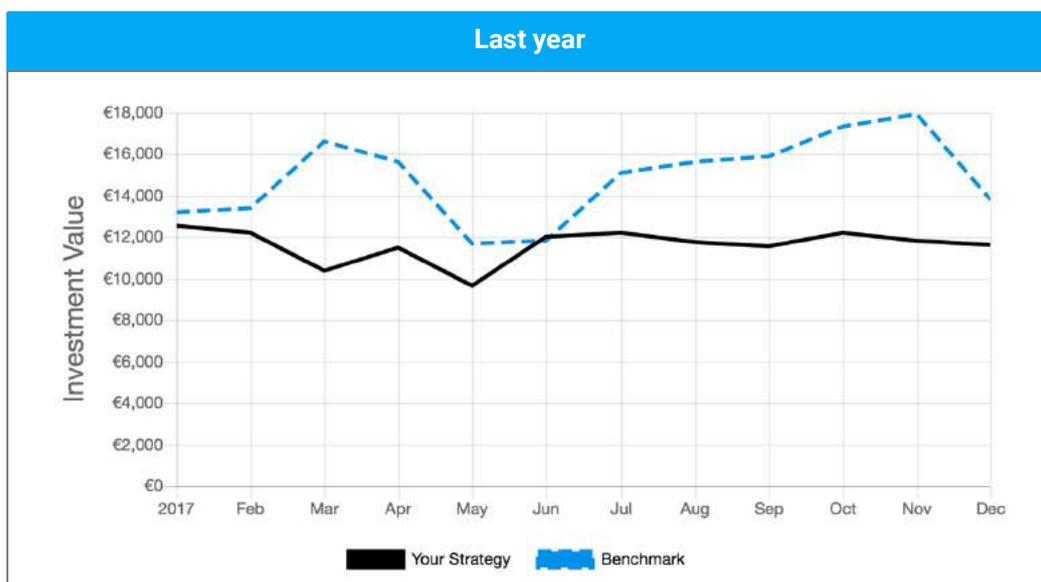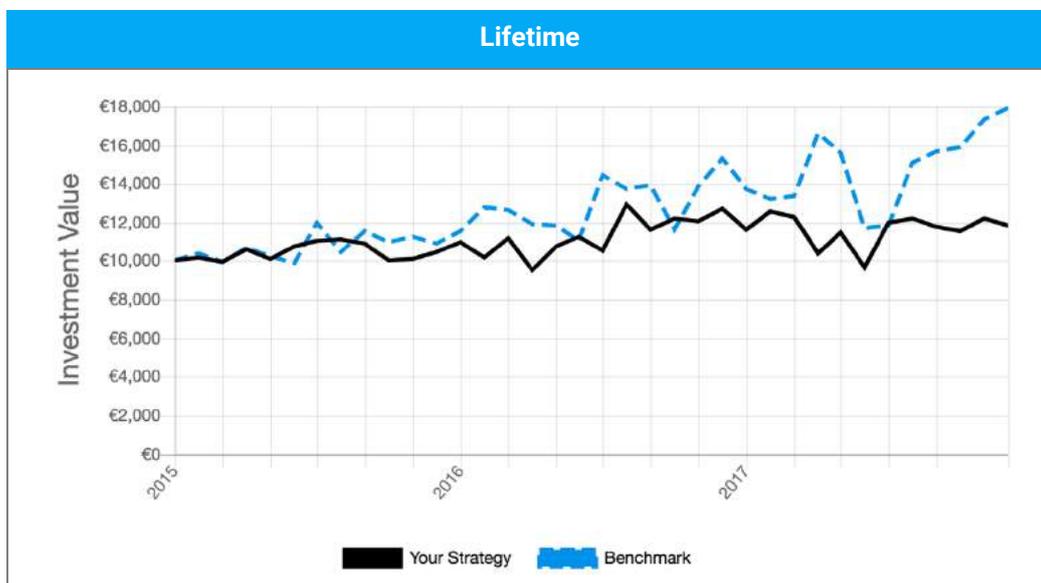
Comparison

The graph below shows the risk and return parameters of your strategy, other investment managers on the platform, and several private investors (grey) who have chosen to share their investment data with DigitalInvest. As you can see, your strategy exhibits the **lowest return amongst all other portfolios**. In fact, it is the **only portfolio that reports a negative return** over its lifetime. We strongly recommend that you consider adapting your current strategy. Otherwise, you risk not meeting your investment goal!

Criterion	Return	Risk	Sharpe Ratio	Omega	Comment
Your Strategy	-3.09%	5.15%	-0.72	0.97	Your current investment strategy.
Manager 1	2.90%	6.10%	0.37	1.12	In order to achieve the highest return while keeping the strategy's risk at a minimum, this investment manager employs a wide dispersion of capital across a variety of countries, regions, and industries. The equity share amounts to 50%.
Manager 2	1.40%	3.90%	0.20	1.05	This investment manager mainly targets those investors who wish to preserve their invested capital and are reluctant to taking on excessive risk. The equity share might amount up to 25%, so some fluctuations in wealth can be expected.
Manager 3	5.60%	7.90%	0.63	1.21	This investment manager has set up a strategy that is aimed at those investors whose primary goal is to preserve their invested capital but who are still open to some risk exposure and wish to benefit from international capital markets. The equity share is aimed to amount to 40-60%, so a certain degree of volatility can be expected.

DigitalInvest Tips & Tricks

DigitalInvest explains

Goal-based investing

Goal-based Investing

A relatively new approach to wealth management that emphasizes investing with the objective of attaining specific life goals. Goal-based investing (GBI) involves a wealth manager or investment firm's clients measuring their progress towards the specific life goals such as saving for children's education or building a retirement nest-egg, rather than focusing on generating the highest possible portfolio return or beating the market.

Consider an investor who is looking forward to retirement within a year, and who therefore cannot afford to lose even 10% of his or her portfolio. If the stock market plunges 30% in a given year and the investor's portfolio is down "only" 20%, the fact that the portfolio has outperformed the market by 10 percentage points would offer scant comfort.

Goal-based investing aims to get around this drawback of the traditional investment approach, which generally focuses on outperforming the market while staying within the investor's threshold for risk. Instead, it uses individual asset pools with an investment strategy that is tailored to the client's specific goals. Thus, if a client's main goals are to save for imminent retirement and fund the college education of her young grandchildren, the investment strategy would be more conservative for the former and relatively aggressive for the latter. As an example, the asset allocation for the retirement assets might be 10% equities and 90% fixed-income, while the asset allocation for the education fund may be 50% equities and 50% fixed-income.

The two biggest advantages of goal-based investing, according to their proponents, are - (i) it increases clients' commitments to their life goals by enabling them to gauge tangible progress towards their goals, and (ii) it reduces negative behavioral biases such as impulsive decision-making and overreaction.

Goal-based investing grew in popularity in the years after the Great Recession of 2008-09, as scores of investors realized the extent to which the attainment of personal goals could be affected by a severe bear market. Millions of hapless investors witnessed their net worth plunge dramatically as a result of the global recession that triggered declines of more than 50% in most major markets, as well as the steep correction in U.S. housing prices.

Adapted from: https://www.investopedia.com/terms/g/goalbased-investing.asp

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DigitalInvest explains the

Sharpe Ratio

The Sharpe Ratio

The Sharpe ratio is the average return earned in excess of the risk-free rate per unit of volatility or total risk. Subtracting the risk-free rate from the mean return, the performance associated with risk-taking activities can be isolated. One intuition of this calculation is that a portfolio engaging in "zero risk" investment, such as the purchase of U.S. Treasury

bills (for which the expected return is the risk-free rate), has a Sharpe ratio of exactly zero. Generally, the greater the value of the Sharpe ratio, the more attractive the risk-adjusted return.

The Sharpe ratio has become the most widely used method for calculating risk-adjusted return; however, it can be inaccurate when applied to portfolios or assets that do not have a normal distribution of expected returns. Many assets have a high degree of kurtosis ('fat tails') or negative skewness. The Sharpe ratio also tends to fail when analyzing portfolios with significant non-linear risks, such as options or warrants. Alternative risk-adjusted return methodologies have emerged over the years, including the Sortino Ratio, Return Over Maximum Drawdown (RoMaD), and the Treynor Ratio.

Modern Portfolio Theory states that adding assets to a diversified portfolio that have correlations of less than 1 with each other can decrease portfolio risk without sacrificing return. Such diversification will serve to increase the Sharpe ratio of a portfolio.

Sharpe ratio = (Mean portfolio return − Risk-free rate)/Standard deviation of portfolio return

The Sharpe ratio is often used to compare the change in a portfolio's overall risk-return characteristics when a new asset or asset class is added to it. For example, a portfolio manager is considering adding a hedge fund allocation to his existing 50/50 investment portfolio of stocks and bonds which has a Sharpe ratio of 0.67. If the new portfolio's allocation is 40/40/20 stocks, bonds and a diversified hedge fund allocation (perhaps a fund of funds), the Sharpe ratio increases to 0.87. This indicates that although the hedge fund investment is risky as a standalone exposure, it actually improves the risk-return characteristic of the combined portfolio, and thus adds a diversification benefit. If the addition of the new investment lowered the Sharpe ratio, it should not be added to the portfolio.

The Sharpe ratio can also help explain whether a portfolio's excess returns are due to smart investment decisions or a result of too much risk. Although one portfolio or fund can enjoy higher returns than its peers, it is only a good investment if those higher returns do not come with an excess of additional risk. The greater a portfolio's Sharpe ratio, the better its risk-adjusted performance. A negative Sharpe ratio indicates that a risk-less asset would perform better than the security being analyzed.

Adapted from: https://www.investopedia.com/terms/s/sharperatio.asp

DigitalInvest about
Behavioral Finance

Who Is Richard Thaler, Economics Nobel Prize Winnner?

Richard Thaler, the father of behavioral economics, has been awarded the 2017 Nobel Memorial Prize in Economic Sciences, it was announced Oct. 9, 2017. As a founding economist in the behavioral finance field, he largely counters the belief of the efficient market hypothesis (EMH), heralded by economists of the neoclassical tradition. He argues that instead of individuals acting in rational and efficient form, there exist deviations where human agents act with fallibility.

The area of behavioral finance had only begun to emerge in the mid-80s. Behavioral finance argued there was a descriptive model of rationality. Instead of considering investors acting in a cold, irrational way, Thaler argues that investors act under the influence of behavioral biases often leading to decidedly less than optimal decisions.

A number of central ideas emerged early in his career that resisted assumptions in economics. For example, he wrote on "the endowment effect" to explain how individuals place a higher value on something they own than if the identical item was someone else's. This phenomenon challenges the rational economic view. Moreover, this departure can be explained by our acute aversion to loss.

Perhaps most strikingly, Thaler's research on prospect theory offered a new way of understanding how individuals react to the financial markets. Here, he takes a closer look at human decision-making. Essentially, he shows how individuals make decisions based on framing, or the context that the decisions are placed within. Thaler argues that prospect theory is perhaps one of the most important tools for behavioral economists.

One part of prospect theory is loss aversion, where the pain of loss is almost twice as powerful as an equal amount experienced from gains.

When it comes to retirement savings, Thaler has also conducted research that uses behavioral economics and psychology. Recognizing that the savings rate in the U.S. is declining, through the shift in many employers offering defined contribution plans instead of defined benefit plans, they acknowledged that the middle class will have to bear more weight in planning for retirement. "As we've switched over from defined benefit plans to defined contribution plans, we've turned over responsibility for enrollment and contribution decisions to individuals, many of whom don't have expertise in this area," says Thaler. Thaler and Shlomo Benartzi created a plan that allows employees to increase their contribution amount as their wages increase over time. In the program's first implementation, the average savings rate of the participants tripled over 28 months, from 3.5 percent to 11.6 percent.

Richard Thaler's work in the behavioral finance field seeks to unpack and explain how individuals can improve their decision making with regards to asset allocation, viewing the financial markets, looking at opportunities for investment, and retirement savings plans. His research seeks to understand the errors entrenched in individuals and applies a model that reflects the way individuals act on an empirical basis.

Adapted from: https://www.investopedia.com/articles/investing/102715/richard-thaler-founding-father-behavioral-finance.asp