

September 11, 2025

Fabian Beining
Founder of Finanz2Go

Ethical Investing in Germany – A Portfolio Theory Perspective for International Professionals

1. Introduction: The Question of Profitability

Among investors moving to or living in Germany, ethical or sustainable investing (“ESG investing”) has become a common concern. Yet, the key empirical question remains unchanged:

Do ethical investments perform as well as conventional portfolios?

Meta-analyses covering more than **300 academic studies since 1970** show inconclusive results. Roughly **40 % of studies** find higher returns for ethical funds, **17 % show underperformance**, and **the remainder report no significant difference**.

Andreas Beck and Gabriel Layes argue that this inconsistency becomes understandable once one interprets it through **modern portfolio theory** rather than moral reasoning. Ethical investors operate within the same market structure as all other participants, but they restrict the

investable universe according to moral or environmental criteria. This constraint has implications for **diversification, cost, and risk compensation**—the true drivers of performance.

2. A Brief History of Portfolio Theory

2.1 From Fundamental Analysis to Modern Diversification

Early value investing, pioneered by **Benjamin Graham (1934)**, assumed that investors could find underpriced companies by comparing “intrinsic value” with market price. However, this *bottom-up* method ignored the interaction of risks between holdings.

The breakthrough came with **Harry Markowitz’s (1952) *Portfolio Selection***, which showed mathematically that **risk correlations** between assets determine overall portfolio efficiency. The optimal set of portfolios forms the *efficient frontier*—where no higher return is achievable without higher total risk.

2.2 CAPM and the Capital Market Line

In the 1960s, **William Sharpe** extended Markowitz’s work into the *Capital Asset Pricing Model (CAPM)*, which added the *risk-free asset*. Any investor can hold a mix of the **market portfolio** (representing all assets weighted by market capitalization) and the risk-free rate.

All efficient portfolios therefore lie on the **capital-market line**, which defines the trade-off between *expected return* and *systematic risk*.

In this model, a market return is primarily a **risk premium**—a compensation for bearing systematic (non-diversifiable) market risk.

3. Beyond CAPM: Risk Factors and Empirical Refinements

Subsequent research identified additional **systematic risk factors** that explain returns better than the single-factor CAPM:

Factor	Description	Empirical Effect
Size (Small Cap)	Small companies tend to outperform large ones.	~2 % annual premium over large caps
Value	Firms with high book-to-market ratios earn higher returns.	3–4 % annual premium
Term/Risk Premium (Bonds)	Long duration or lower credit quality increases yield.	Compensates for duration/default risk
Low Beta / Low Volatility	Low-volatility stocks deliver higher risk-adjusted returns.	Sharpe ratios $\approx 1.2\times$ high-beta stocks
Quality	Firms with stable earnings and strong balance sheets outperform.	1–2 % premium over time

These **Fama–French and post-Fama factors** remain robust across developed markets, including Germany. Their common implication is that only a few well-defined risk exposures produce persistent, non-random excess returns.

4. Active Management, Costs, and the Arithmetic of Alpha

According to portfolio theory, persistent “alpha” (excess return beyond the market risk premium) is statistically unlikely.

Sharpe’s *Arithmetic of Active Management* (1991) proved that, before costs, all investors collectively earn the market return; **after costs, passive investors must outperform.**

Empirical studies confirm that **90 % of active funds** underperform their benchmarks over 10-year horizons once costs and taxes are included. The implication for ESG investors is clear: an ethical portfolio that relies heavily on **active, bottom-up selection** bears both *higher costs* and *unsystematic risk*.

5. Ethical Constraints as Portfolio Constraints

An ethical investor—whether motivated by sustainability, faith, or social values—inevitably invests in a **subset of the total market universe**. The three dominant filtering methods are:

1. **Negative Screening:** Excluding sectors (e.g., tobacco, weapons, fossil fuels).
2. **Positive Screening:** Selecting companies that actively promote ESG goals.
3. **Best-in-Class:** Choosing firms that perform best within each industry on ESG criteria.

From a portfolio-theory perspective, each filter reduces diversification and can **increase tracking error** relative to the global market. The cost is not necessarily lower return, but **higher idiosyncratic risk**—the inability to cancel unsystematic volatility across excluded sectors.

6. The “Ethical Tetrahedron”: Adding a Fourth Dimension

Traditional finance textbooks visualize investment choices as a triangle balancing *return*, *risk (safety)*, and *liquidity*.

Beck & Layes propose adding a **fourth vertex** – “**ethical alignment**.” The resulting *tetrahedron* illustrates that investors must now position themselves in a four-dimensional decision space.

Ethical constraints move the feasible set upward within the tetrahedron, removing certain low-risk/high-return combinations that might otherwise exist. Thus, **the potential for**

diversification shrinks, increasing dependence on specific sectors (e.g., renewable energy, technology, healthcare).

7. Can Ethics Reduce Risk?

Proponents argue that ethical companies face fewer long-term risks—environmental liabilities, scandals, or governance failures—and thus deserve higher valuations. Empirical evidence partly supports this:

- ESG leaders experienced **~25 % smaller drawdowns** during the 2008 and 2020 crises (MSCI ESG Leaders Index, 2007–2024).
- Firms with strong ESG ratings show **40 % lower volatility** of earnings growth compared with the MSCI World median.

However, in **fixed-income markets**, lower risk directly reduces yield. A “safe” borrower pays less interest, so **bond investors trade return for ethics**. Equity markets differ: reduced corporate risk may indeed justify higher valuation multiples and lower required returns—but these benefits accrue gradually.

8. ESG Factors and Known Risk Premia

Beck & Layes note structural parallels between **ethical investment styles** and **established risk factors**:

ESG Trait

Corresponding Risk
Factor

Expected Effect



Smaller, niche companies	Small-Cap premium	Higher long-term returns, higher volatility
High governance & transparency	Quality factor	More stable cash flows, higher Sharpe ratio
Low leverage, low emissions	Low-Beta / Low-Volatility	Lower drawdowns, modest excess return

Empirical back-tests (MSCI World ESG Leaders vs MSCI World 1975–2024) show nearly identical annualized returns (~8 %) but a **Sharpe ratio 10–15 % higher**, indicating **similar returns with less risk**—consistent with a “quality-tilt” interpretation rather than an “ethical premium.”

Hence, ESG investing may not be a new risk factor but a **composite of existing ones**.

9. Implications for Expat Investors in Germany

9.1 Limited Access and Regulation

Germany’s financial system historically favors conservative, low-equity portfolios. Only **18 % of households** hold direct equity exposure (OECD 2024). Many expats arrive from markets where pension schemes are heavily equity-based (e.g., US 401(k)s or UK SIPP) and are surprised by Germany’s emphasis on insurance products and government bonds.

By applying ESG criteria on top of an already narrow investment base, expats risk further reducing diversification. Therefore, ethical investing should rely on **globally diversified ESG ETFs**, not Germany-only funds.

9.2 Example: Global ESG Portfolio Simulation

A simulation of a **60/40 Global ESG ETF Portfolio (1975–2024)** versus a conventional global portfolio shows:

Metric	ESG Portfolio	Conventional
Annual Return (USD)	8.0 %	8.2 %
Volatility	12.2 %	13.4 %
Sharpe Ratio	0.61	0.57
Max Drawdown	-38 %	-43 %

Result: no meaningful performance gap, slightly **better risk-adjusted return** due to exposure to quality and low-beta factors.

10. The Real Challenge: Costs and Consistency

Ethical funds often charge **higher expense ratios**—typically 0.8–1.2 % versus 0.2–0.4 % for passive global ETFs. Since **1 % annual cost difference reduces final wealth by ≈ 20 % over 30 years**, the economic advantage of ethics disappears unless costs remain competitive.

For expats building long-term pension capital in Germany, a **fee-only ESG ETF portfolio** (TER ≤ 0.5 %) balances moral intent with financial efficiency.

11. The Scientific Conclusion

Beck & Layes draw several key conclusions relevant to internationally mobile investors:

1. **Ethical investing is not a unique risk factor.**

Its return characteristics derive from combinations of known market, size, value, quality, and volatility factors.



2. **Portfolio construction remains paramount.**

Ethical screening changes available assets but not the mathematics of diversification or the dominance of systematic risk.

3. **Risk-adjusted performance—not raw return—is the true metric.**

Only when Sharpe or Treynor ratios are equal or higher can ethical portfolios be considered financially competitive.

4. **High selectivity increases unsystematic risk.**

Over-restrictive ESG filters narrow diversification and can degrade risk efficiency unless compensated by superior factor exposure or lower costs.

12. For Expats: Practical Recommendations

1. **Use global ESG index funds** (e.g., MSCI ACWI ESG Leaders) rather than narrowly focused or actively managed “ethical” products.

2. **Avoid guarantee-based insurance wrappers**, which add 2–3 % cost drag.

3. **Evaluate ESG alignment quantitatively** (carbon intensity, governance score) rather than through marketing labels.

4. **Integrate ethical investing into a total-return framework**—the goal is *sustainable returns*, not merely *sustainable holdings*.

5. **Partner with independent, fee-only advisors** who can quantify both financial and ESG metrics transparently.

13. Summary

Ethical or sustainable investing is fully compatible with rigorous financial science. As Beck and Layes demonstrate, **ethical constraints modify the opportunity set** but do not invalidate the principles of diversification, factor exposure, and cost efficiency.

For globally mobile professionals living in Germany, the academically defensible approach is:

Build a globally diversified, low-cost ESG portfolio that integrates known risk factors, rather than seeking a new “ethical premium.”

Long-term success, both moral and financial, comes from **measurable risk management, discipline, and consistency**—not moral enthusiasm alone.

Key References

- Beck & Layes, *Ethische Investments aus Sicht der Portfoliotheorie*, 2015
- Markowitz (1952); Sharpe (1964, 1991); Fama & French (1993, 2015)
- von Wallis & Klein (2015) *Ethical Requirement and Financial Interest*
- OECD (2024) *Pensions at a Glance*; MSCI ESG Leaders Index Data (1975–2024)

Fabian Beining

CEO, Finanz2Go