

## T A X   A W A R E



April 23, 2024 - [Stanley Krasner](#), [Joseph Liberman](#), [Nathan Sosner](#), [Sydney Filler](#)

We use historical strategy simulations to evaluate the advantages of donating appreciated stock in the context of tax-aware long-short factor strategies. We find long-short strategies exhibit several advantages over long-only investments.

## T A X   A W A R E



March 7, 2024 - [Joseph Liberman](#), [Nathan Sosner](#)

We illustrate how combining VPFs (variable prepaid forwards) with tax-aware strategies can help diversify low-basis stock and thereby improve after-tax wealth accumulation. Long-run after-tax wealth outcomes are significantly better when a VPF is combined with tax-aware long-short factor strategies rather than with other alternatives, such as a direct-indexing strategy or a market index fund.

## E S G   I N V E S T I N G



March 1, 2024 - Marc Eskildsen, Markus Ibert, Theis Ingerslev Jensen, [Lasse H. Pedersen](#)

The greenium (the expected return of green securities relative to brown) is a central impact measure for ESG investors. We propose a robust green score combined with forward-looking expected returns, yielding a more precisely estimated annual equity greenium.

## M A C H I N E   L E A R N I N G



November 3, 2023 - Oliver Hellum, [Lasse H. Pedersen](#), Anders Rønn-Nielsen

We show that asset pricing has a strong global component in the sense that a common global model has stronger predictability of stock returns than local models estimated in each country – even when the global model is estimated without the use of local data. Nevertheless, asset pricing has a small local component – in order to detect it, we develop a refined transfer learning model that gains power and precision by building off the global component.

## FIXED INCOME



October 5, 2023 - Jens Dick-Nielsen, Peter Feldhütter, [Lasse H. Pedersen](#), Christian Stolborg

We demonstrate that the literature on corporate bond factors suffers from replication failures, inconsistent methodological choices, and the lack of a common error-free dataset. Going beyond identifying this replication crisis, we create a clean database of corporate bond returns where outliers are analyzed individually and propose a robust factor construction.

## MACHINE LEARNING



August 1, 2023 - [Bryan T. Kelly](#), Dacheng Xiu

In this survey the nascent literature on machine learning in financial markets, we highlight the best examples of what this line of research has to offer and recommend promising directions for future research.

## ESG INVESTING



March 14, 2023 - [Lasse H. Pedersen](#)

We show that green finance should not be used if the carbon price equals its social cost. However, with too low carbon prices, green finance can implement the social optimum if the cost of capital can be controlled and there are no stranded assets. We show explicitly how to "translate" a carbon tax into green finance terms, highlight how green finance should depend on scope 1, 2, and 3 emissions, present its limitations, and illustrate the predictions empirically.

## ESG INVESTING



September 23, 2022 - [Lasse H. Pedersen](#), Peter Feldhütter

We examine whether capital structure is irrelevant for enterprise value and investment when investors care about ESG issues, which we denote "ESG-Modigliani-Miller" (ESG-MM). Theoretically, we show that ESG-MM holds if ESG is additive and markets are perfect. Empirically, we provide evidence of failure of ESG-MM, implying that firms and governments can exploit non-additive ESG or segmented markets.

## MACHINE LEARNING



August 18, 2022 - Theis Ingerslev Jensen, [Bryan T. Kelly](#), Semyon Malamud, [Lasse H. Pedersen](#)

We propose that investment strategies should be evaluated based on their net-of-trading-cost return for each level of risk, which we term the "implementable efficient frontier." While numerous studies use machine learning return forecasts to generate portfolios, their agnosticism toward trading costs leads to excessive reliance on fleeting small-scale characteristics, resulting in poor net returns. We

develop a framework that produces a superior frontier by integrating trading-cost-aware portfolio optimization with machine learning

T A X   A W A R E



May 12, 2022 - [Nathan Sosner](#)

Entrepreneurs and executives holding much of their wealth in a highly appreciated single stock face either the high risk of idiosyncratic volatility and potentially catastrophic losses, or selling stock and facing an immediate, punitive tax burden. This paper evaluates this choice and explains how it relates to classic betting strategies and economic theory, finding tax-efficient techniques might strike the balance between the urgency to diversify concentrated risk and aversion to taxes.

