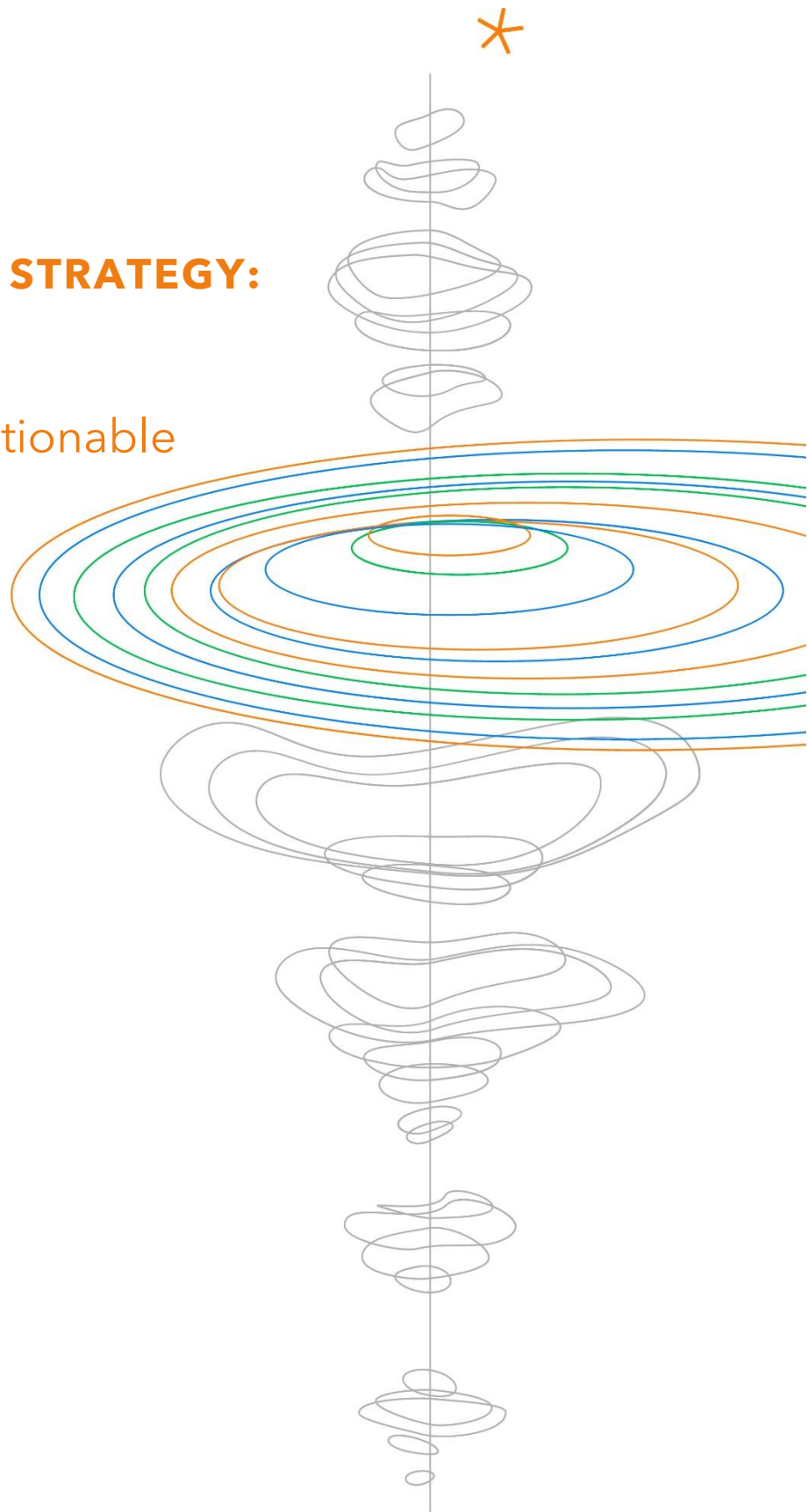


TOBAM LBRTY® EM STRATEGY: EMPIRICAL FACTS

Original research, actionable
insight



July 2024

For Professional Investors

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TOBAM recently implemented LBRTY®, a strategy aiming to reduce direct and indirect exposure to the autocracy risk factor, understood as the risk associated with investing in autocratic regimes.

TOBAM's investment thesis with LBRTY® is that a portfolio exposed to countries where arbitrariness and economic irrationality reign, does not fully benefit from the risk it is taking in these countries. Said differently, risk borne in autocracies yields less performance than elsewhere.

This note discusses TOBAM LBRTY® Emerging Markets strategy, through 3 features:

1. LBRTY® EM, contrary to its benchmark, tilts away from stocks linked to authoritarian regimes;
2. LBRTY® EM differs from a traditional factor portfolio: beta to factors exhibits variability over time, in both (sign) and size (magnitude);
3. most of LBRTY's excess return comes from limiting indirect exposure to autocracies.

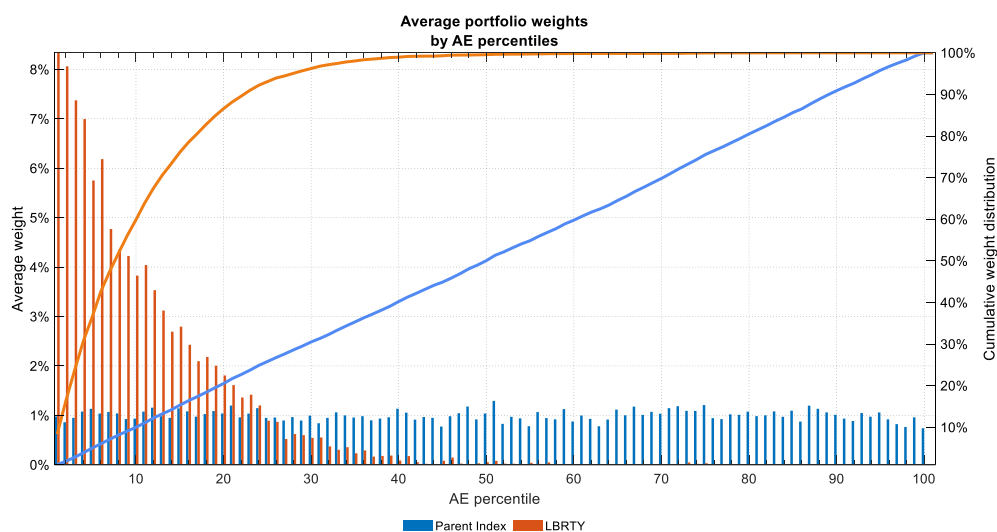
I. LBRTY'S ALLOCATION TILTS AWAY FROM STOCKS LINKED TO AUTHORITARIAN REGIMES

TOBAM's proprietary Authoritarian Exposure (AE) methodology measures the exposure of each stock to autocratic country risk. All these countries belong to emerging markets, the market capital-weighted benchmark comprises indeed many stocks incorporated in authoritarian countries, in terms of number and collective weight. The remaining stocks are still subject to this risk, even though they are incorporated in democratic countries.

The graphic below shows that the emerging market benchmark (Bloomberg EM), in blue, is indifferent in its allocation to AE: sorting the stocks by AE, we see that **the weights on each level are uniform, with no bias towards low or high exposures.**

By contrast, LBRTY® EM, in orange, seeks to minimize its exposure, while staying close to the benchmark. Not only does it exclude stocks incorporated in authoritarian countries, but it also penalises remaining stocks when they have strong ties to those countries, as measured by beta. The resulting allocation shows that the largest portfolio weights are on the low AE percentiles, and almost all stocks display below average AE.

Figure 1: LBRTY® EM Portfolio allocation vs. authoritarian exposure, by percentile



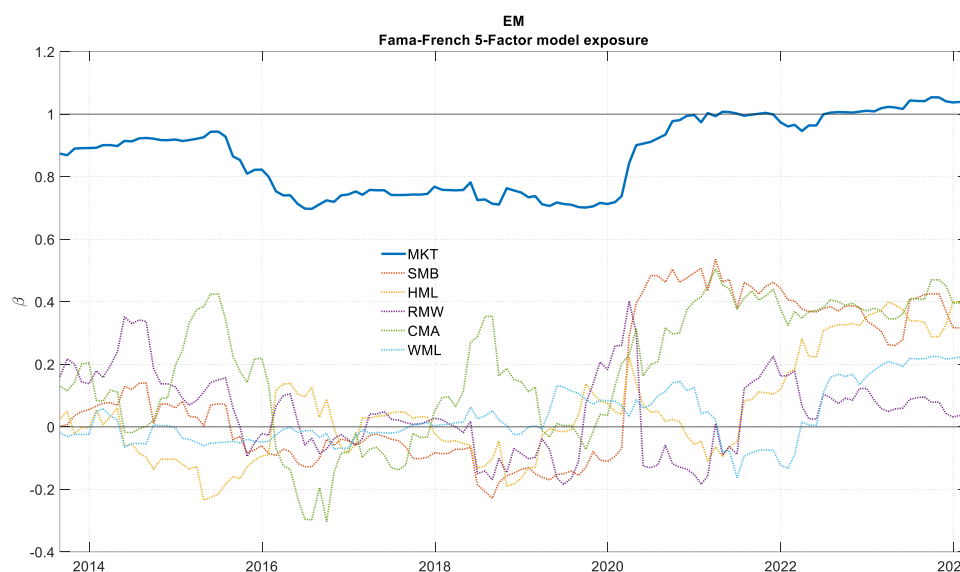
Source: Bloomberg TOBAM. The period covered is from 2008 to 2023. Each percentile point comprises about 10 stocks.

II. LBRTY® EM DIFFERS FROM A TRADITIONAL FACTOR PORTFOLIO

The regression of portfolio return over the monthly Fama-French factors (from K. French’s website) reveals considerable variability in exposure to traditional risk factors between 2014 and 2024, except for market beta (0.9 in average). The CMA (Conservative Minus Aggressive) factor, one of Fama-French’s quality factors, is significantly positive in an ex-post regression, though its amplitude varies with time.

LBRTY® EM has thus less systematic risk than its benchmark¹, avoiding the unrewarded risk associated with Authoritarian Exposure, a choice that translates as a slight quality bias in traditional analysis.

Figure 1: LBRTY® EM Fama French Factor analysis



Source: Kenneth website and TOBAM. Five-year regression analysis based on monthly data. The period covered is from September 2008 to February 2024. The Betas are computed on Factors are on Emerging market universe. Size (SMB), Value (HML), Quality (RMW & CMA), Momentum (WML).

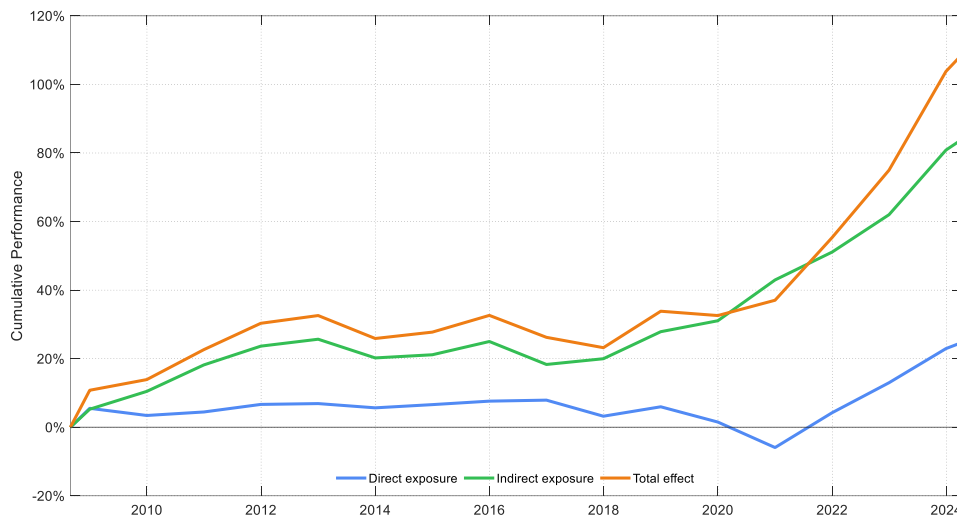
III. MOST OF LBRTY'S EXCESS RETURN COMES FROM LIMITING INDIRECT EXPOSURE TO AUTOCRACIES

The difference in composition between LBRTY® EM and its benchmark is twofold: the portfolio excludes all authoritarian stocks, and the portfolio re-weights the remaining democratic stocks to account for their exposure to autocratic economies. The former can be classified as direct exposure and the latter as indirect exposure.

This corresponds to a performance attribution between the direct exposure (allocation effect) and indirect exposure (selection effect). The latter is both consistent and dominant. Indeed, as depicted in the figure below, the indirect exposure (in green), explains the vast majority of the LBRTY® EM relative performance (in orange). Said differently, solely excluding countries from a portfolio has a marginal effect on performance, whereas the choice of weights within the remaining countries accounts for almost all the excess return.

¹ Benchmark: BBG Emerging Markets L/M TR

Figure 3: Cumulative performance attribution - LBRTY® EM vs Parent index
Aug 2008 to Mar 2024



Source: TOBAM, Bloomberg. The graph represents the cumulative the LBRTY® EM relative performance in orange and its decomposition between the direct exposure (in blue) and indirect exposure (in green).

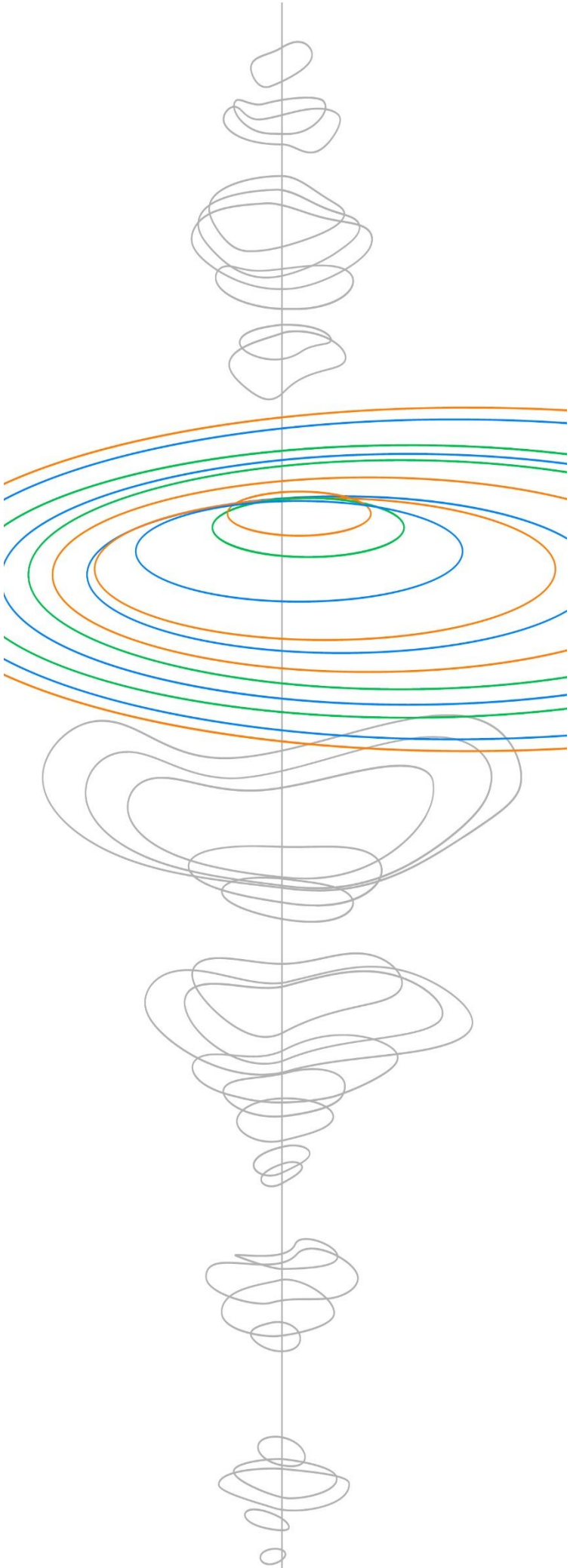
IV. CONCLUSION

TOBAM has observed that countries where democracy, human rights, and civil rights are respected and preserved create favorable conditions for the effective allocation of labor and capital. This environment promotes innovation and economic growth, through investors' confidence in the stability and fairness of institutions.

The LBRTY® portfolio commits to this philosophy by minimizing exposure to autocratic country risk through excluding authoritarian countries and using the Authoritarian Exposure (AE) to manage indirect exposures.

On the EM universe, the market cap-weighted benchmark does not score well on that metric, yielding a relative under-performance that can't be explained by the usual risk factors. LBRTY's excess return over the market cap-weighted benchmark is primarily driven by its management of the indirect exposure of the stocks.

With the creation of LBRTY®, investors now have a tool to address geopolitical risk and instability in their foreign and emerging market equity exposures. This strategy not only enhances long-term expected returns but also reduces market risk caused by geopolitical instability. By carefully selecting stocks using their Authoritarian Exposure, LBRTY® offers a more stable choice for long-term investors seeking enhanced risk-adjusted returns.



ABOUT TOBAM

TOBAM is an asset management company offering innovative investment capabilities designed to increase diversification. Its mission is to provide rational and professional solutions to long term investors in the context of efficient markets.

The Maximum Diversification® approach, TOBAM's flagship investment process founded in 2006, is supported by original, patented research and a mathematical definition of diversification and provides clients with diversified core exposures, across equity and fixed income markets.

In line with its mission statement and commitment to diversification, TOBAM also launched a separate activity on cryptocurrencies in 2017.

As of December 2023, TOBAM manages approx. \$5 billion on behalf of clients globally. TOBAM's team is composed of 40 professionals.

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