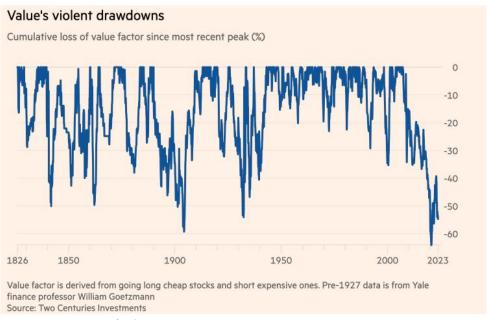
... is the reference paper of a Bloomberg article entitled "A fight over factor investing tests a pillar of modern finance" from spring of 2024 in which the authors report about the findings of three Canadian researchers, that the results of the Fama/French factors differ when downloading the data from <u>K</u>. French website at Dartmouth. The first version of the paper by Pat Akey, Adriana Z. Robertson, and Mikhail Simutin stems from 2021 but it took an <u>update in 2023</u> and two years of time for Fama/French to respond with a publication entitled <u>"Production of U.S. Rm-Rf, SMB, and HML in the Fama-French Data Library"</u>.

The factors have been – and still seem to be – regarded as a "gold standard" for three decades and barely anyone casted them in doubt, as the factors delivered performance up to their promise and Fama was awarded with the Nobel Prize in economics in 2013. They are widely used in academic finance or in financial research to evaluate the performance of active investment funds. Interestingly, despite the well-known fact, that the CAPM has it's limitations in the real world, the Fama/French factors aren't widely used by corporate finance professionals as most of them still use the CAPM or a more pragmatic way to calculate cost of capital according to a paper entitled "Cost of Capital, A practical guide to measuring opportunity costs" by Mauboussin/Callaghan from 2023.

But the bear market in equity factor- and many other alternative risk premia between 2017 and 2020/2021 – also known as the "quant winter" – which for example delivered the largest drawdown in US-value stocks since more than a century according to an FT- article forced many investors to sell their exposures in panic mode, to doubt on the existence of alternative risk factors in general or to look behind the scenes and ask questions about methodologies, data etc.



Source: FT; A quant winter's tale

Within their paper, the three authors tried to find an answer, why the factors differ and how to deal with the insights. Basically, they came up with the conclusion, that changes in the underlying data and in the methodology are mainly responsible for the differences. Moreover, changes to the methodology seem to have more explanatory power than those in the underlying datasets: "A large portion of these retroactive changes appear to be driven by modifications to the factor construction

methodology rather than by revisions to the underlying data. Moreover, they found: "Model evaluation tests suggest that more recent vintages do not perform better."

The findings seem to be a **confirmation on what other academic researchers denoted a "replication crisis in finance".** We've written about that a couple of times in the past as, i.e. in

- Has factor investing really failed to live up to its many promises? (2019)
- Develop theories, not trading rules vs. the evolution of risk premia (2020)
- The Smart Beta Mirage (2020)

and pointed out, how to deal with many of the questions and the pitfalls of replication. In a recently published paper "<u>The Three Types of Backtests</u>", M. Lopez de Prado and his colleagues provided guidance, which

Data Quality

 Survivorship Bias, Point-in-Time Considerations and Restated Data, Incorrect and Missing Data, Dealing with Outliers

Data Representativeness

Statistical Integrity

Data Mining and Data Snooping, Accounting for Selection Bias under Multiple Testing

Modelling and Generalisation

Look-Ahead Bias, Introducing an Embargo Period

• Costs and Constraints

Transaction Costs, Short-Sale Constraints, Liquidity Constraints, Universe Selection

• Performance Evaluation

o Causal Graphs, Performance Metrics, Holistic Evaluation of Metrics, Peer Review

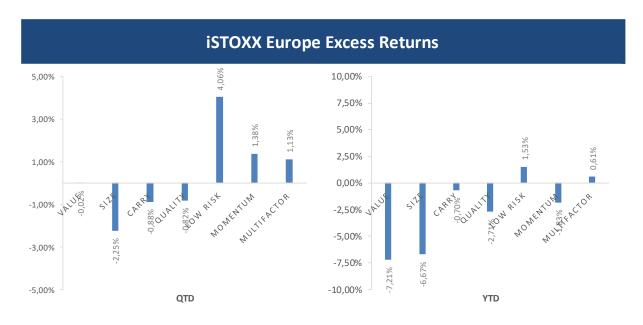
Conclusion:

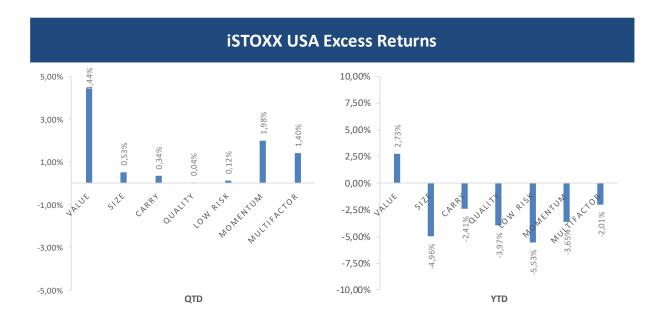
When viewed through this lens, the Fama/French factors fall short of most of these points. Moreover, the goal in analytical efforts – for example in fund- and manager selection or cost of capital calculations— is to work out investment alternatives, i.e. active vs. passive, risk premia vs. alpha, risky projects vs. doing nothing, M&A etc. And as the Fama/French factors are not investable, researchers should consider real world investable factors- like the iSTOXX indices. And with respect to backtesting, Lopez de Prado and his co- authors conclude:

"Given these considerations, it is evident that while backtesting is an invaluable tool, it must be utilised with care and not as the primary driver of research but rather to validate a semi-final and well-formed investment strategy. In particular, it is highly advisable that researchers backtest only strategies that are supported by a sound causal theory...."

Factor performance

Low Risk and Momentum outperformed in Europe during the Q3/2024 while all factors posted positive excess returns within the US. Year to date, the picture looks still bleak for all Long only single factors on both sides of the Atlantic as only Low Risk in Europe and Value within US are in positive excess return territory.







Multi-Factor

- Multi-Factor XC

Alpha Centauri Indexing - Data as of 30.09.2024

Description:

The iSTOXX Europe Single Factor index family developed by STOXX in collaboration with Alpha Centauri offers investors a unique and very innovative way to target and capture premia.

It consists of six single factors that aim to capture well-known risk premia and one multi-factor that aims at simultaneously capturing premia from the aggregate of all single factors rather than from just one source of risk alone.

All indices are constructed to maximize the exposure to their particular factor and minimize unwanted risks. While constructing the final indices the FIS APT risk model is used to measure and restrict risk.

For more information go to ${\bf www.alpha-centauri.com}$ or ${\bf www.stoxx.com}$

Performance and Volatility Breakdown							
Name	Ticker	Return 3 Months	Return 6 Months	Return 12 Months	Return Live (1.4.)	Vola pa	Vola pa Live (1.4.)
Carry	ISECFER Index	1,8%	3,5%	16,8%	103,5%	13,5%	13,2%
Low Risk	ISERRER Index	6,7%	7,1%	19,3%	106,7%	12,5%	12,2%
Momentum	ISEMFER Index	4,0%	6,1%	17,6%	82,8%	13,4%	13,1%
Quality	ISEQFER Index	1,8%	3,0%	17,1%	87,6%	13,2%	12,9%
Size	ISEZFER Index	0,4%	1,0%	11,0%	63,0%	13,2%	13,0%
Value	ISEVFER Index	2,6%	2,1%	11,4%	20,8%	14,4%	14,1%
Multi-Factor	ISEXFER Index	3,8%	6,7%	18,9%	80,8%	12,7%	12,5%
Multi-Factor XC	ISEXFCR Index	3,8%	5,5%	16,7%	80,3%	12,8%	12,5%
Benchmark	SXXR Index	2,6%	3,8%	19,2%	96,5%	13,6%	13,3%
Ex	xcess Return 3	Months			Excess Retui	rn 6 Months	
6,0% 5,0% 4,0% 3,0% 2,0% 1,0% 0,0% -1,0% -2,0% -3,0% -4,0% Carry Quality Multi-Factor	Size Multi-Facto	Mon Value	6,0% 4,0% 2,0% 0,0% -2,0% -4,0% enentum e	66	55,201 th 30,00,201 th Low Risk Size Multi-Fac	Va	TOTAL SOLUTION OF THE PARTY OF
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Multi-Factor

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