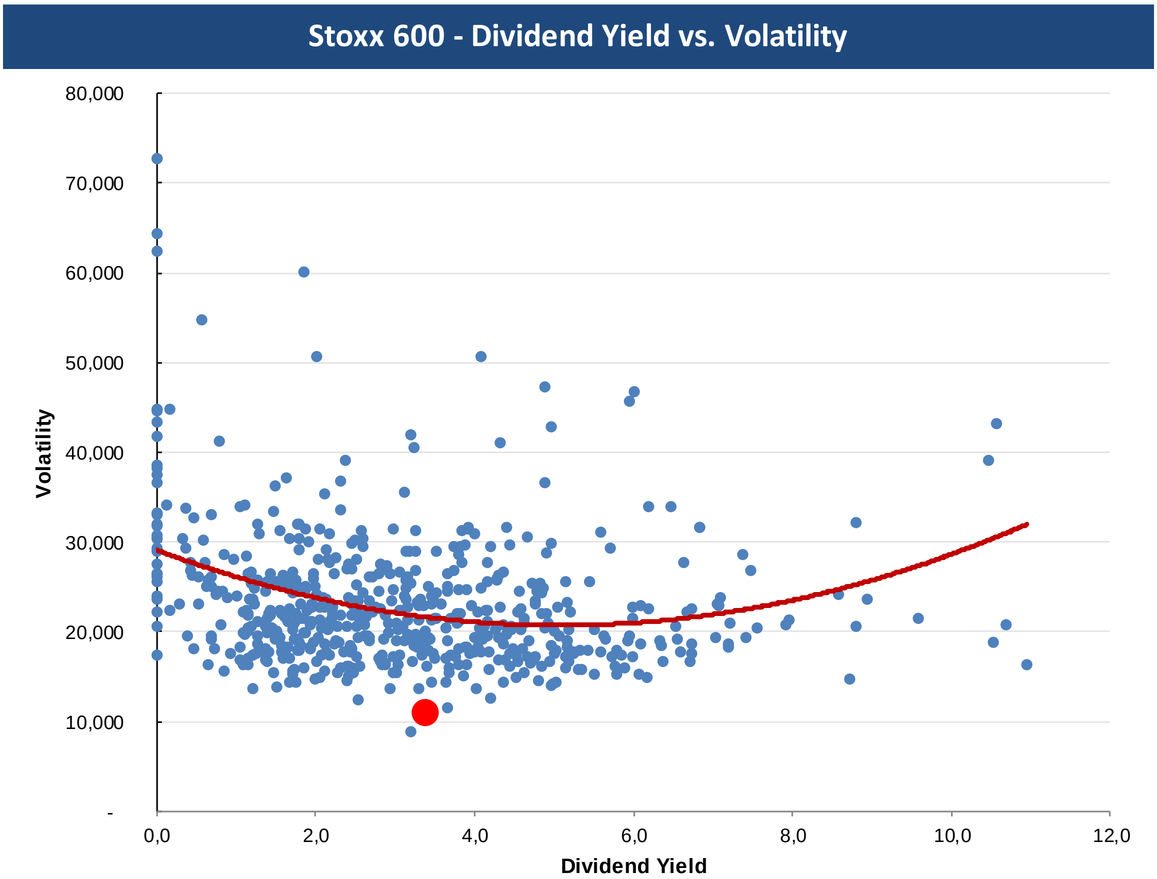
ALPHA CENTAURI
Riskpremia – Made in Germany

iSTOXX Europe Factor Indices Quarterly – Dividend investing and the World Cup 2018

Tough times for all fans of Germany´s, Argentina´s or Brazil´s soccer teams during the 21st world cup in Russia these days. It is the first time since 1930, that neither Brazil nor Germany are one of the semi-finalists. All three combined have been semi-finalists 28 times (one third of 84 positions) and won more than half of all World Cup titles. Asked in a TV interview, what went wrong, the team co-ordinator of Germany´s national football association stated, that **marketing** in front of the World Cup **has been a great success** compared to four years ago - but unfortunately, **the team underperformed lofty expectations**.

A closer look at the performance of dividend strategies (index based & funds) over the last few years reveals a similar picture. Using data from Bloomberg and comparing the performance of dividend indices in developed and emerging markets as well as regional subcomponents (i.e. Europe and US) with their market cap weighted benchmarks, **most dividend indices underperformed between -5% and -8% over the last two years** and in some cases **more than -15% over the last five years.** Performance results of active managed funds are quite similar. As of Friday, July 06th, Morningstar´s fund database shows 581 Global and 237 European equity funds (and tranches) with a focus on dividends. In case of **"Europe", 90% underperformed** broader regional benchmarks over three years and in case of **"Global"** the result is even more surprising, as **only 4 funds out of 581 outperformed** market cap weighted global aggregates over the last 5 years. As dividend funds have been able to attract huge inflows over the last few years, **marketing and the hunt for yield lead to a success in sales but performance didn´t follow**. Investors seem to accept high opportunity costs (underperformance) in exchange for regular income in this low interest rate environment.
As "yield" is one of the single factors in several Smart Beta- or equity factor families, it shouldn´t come as a surprise, that critics of factor investing receive more ammunition in favor of their arguments like Richard Wiggins in his IPE interview (Smart Beta Is Making This Strategist Sick) or the Flossbach Research Institute (Smart Beta Etf´s- Euphemismus par excellence) in the light of those results. In both cases, **the focus is on the mathematical side of factor investing only** – pitfalls of backtesting and HARKing (Wiggins) and ***average*** performance of factor ETF´s in US (Flossbach), which is without analytical value per se. But shifting the focus away from pure math to the economic side of factor investing, there should be no doubt, that there are **systematic risk premia *across* asset classes** (i.e. term, credit and equity risk premia) as well as ***within*** **asset classes** (value, momentum, etc.) **available**. In terms of risk-based premia, its´ the business of banks and insurance companies since centuries - applied to liquid financial markets. **Factor premia** in this sense **are neither alpha nor "anomalies"** – they are a **compensation for systematic risk beyond market risk.**

But what about dividend investing? For a lot of investors, dividends are seen **either** as a more or less **stable source of income** – **or dividend yield serves as a value signal**. Unfortunately, these are not two sides of the same coin as both have a different return and risk profiles over time. The following graph reveals a **non-linear relationship between dividend yield and volatility** within STOXX Europe 600 (overall market red dot):



The **left hand side** of the graph contains **stocks of distressed companies**, where dividends have been cut or skipped **as well as growth companies** with no or low dividends. Both groups typically exhibit higher leverage on average and paying no or low dividends leads to the result, that these stocks are basically **"long duration assets"** or **"out of the money calls"** and show higher volatility as they are more risky.

The **right hand side** in many cases **shows stocks "under pressure"**. Higher dividend yields but where dividend payments are perceived to be at risk. If dividends are cut or skipped, the stocks move to the upper left side of the graph. **This is similar to short duration bonds**, where yields rise disproportionately in case of rising default risk, leading to flattening or inverting yield curves – well known for example from recent developments in Italy. As in other cases, excess return is a function of the difference between **"implied" and "realized"** (dividend). Nevertheless, **investors are exposed to higher risk** on average, **if they try to harvest** significant **higher yields**.

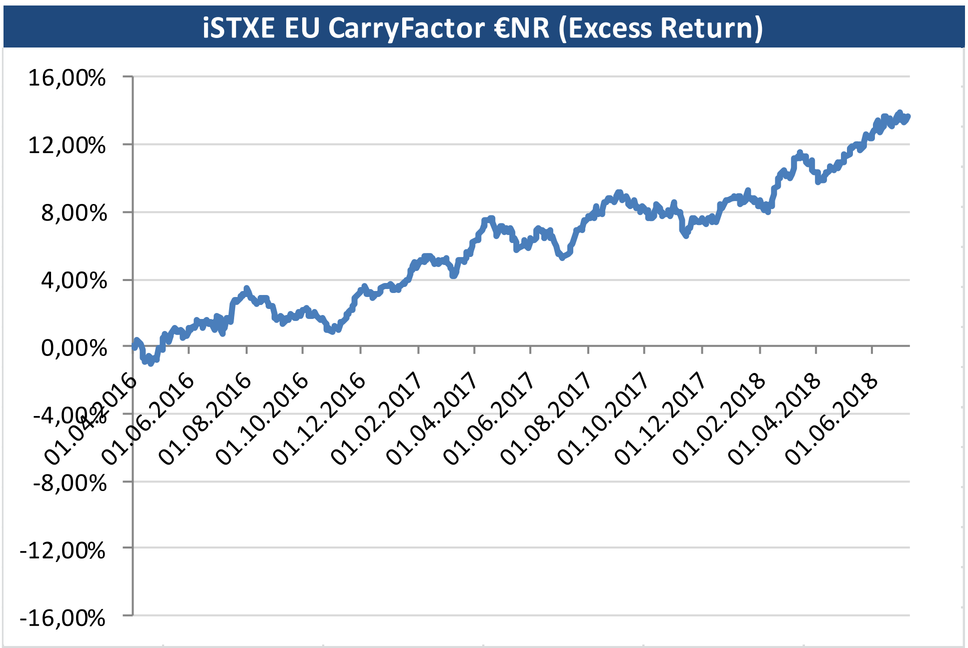
So, it shouldn´t come as a surprise, that **more than half of the best 20 funds** with a dividend focus in Europe, carry an **"above average" or "high" risk rating from Morningstar**. Even without having a more detailed look at these funds, it can be assumed, that they are investing alongside the "value profile" of dividend yield. This is confirmed by taking a look at the excess returns of "value" and "dividend yield" in factor- or Smart Beta space; **value outperformed** market cap weighted benchmarks, while **dividend yield underperformed** over the last two years.

What about alternatives? As in asset classes like bonds, credit and commodities, there´s a difference between risk adjusted returns at the frontend and the backend of the risk curve – a **carry or curve effect**. Investors looking to **optimize their overall performance instead of their "regular income"** (high cash flow in terms of higher yield) **solely** by investing in yield seeking strategies, should have a look at

iSTOXX Europe Carry index, which

- aims for "stable shareholder yield" and not the "value side" of the coin
- outperformed STOXX 600 since 01.04.2016 by 13.88 %
- and other European yield seeking strategies by approx. 20% since then.

The index can easily be traded via EUREX futures (Ticker: FKSA) and with ~10 investment banks via swap or in absence of ETF´s as a certificate (even collateralized, if needed).



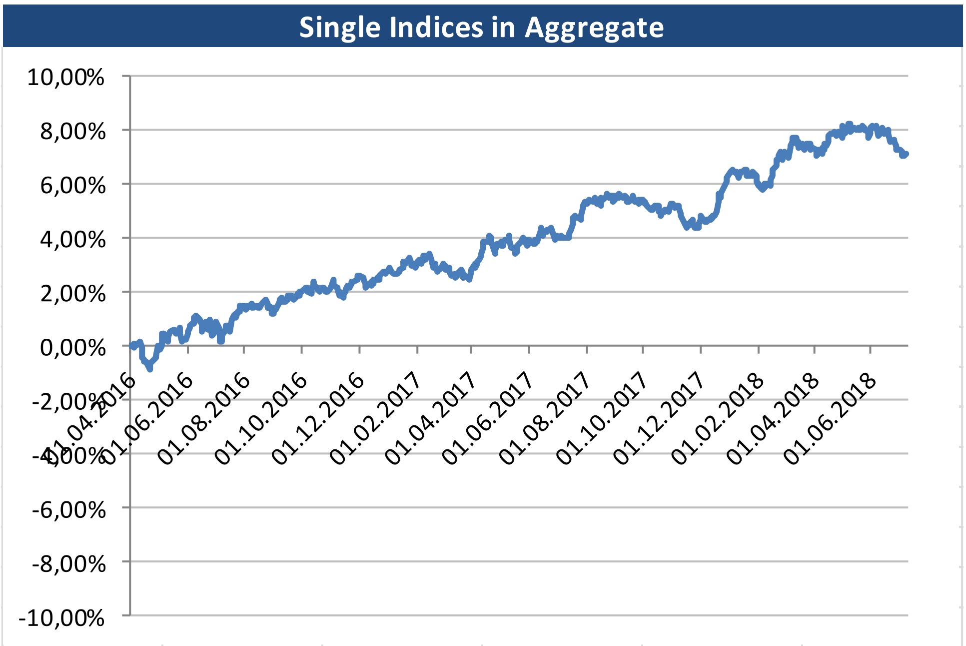
Summary:

A categorization alongside "dividends" alone and - even more problematic - an investment in yield or carry seeking strategies merely based on three year track record may lead in totally different directions, as **return and risk profiles over the cycle are different**. Investors should consider the frontend or the backend of the risk curve, because using market cap weighted benchmarks as a starting point like in the graph shown above (red dot), it seems to be **quite difficult to harvest excess returns** otherwise, because of a **"stuck in the middle"** - problem.

That takes us back to Germany, Argentina and the world cup. A merely concentration on ball possession is a concept with a reasonable track record over the last 10 years, but represents the "middle" in today´s football. They either have to aim for more stability in their defence (carry) or playing more vertical, which is more risky (value) – or both, like France.

Factor performance Q2/2018

Performance has been quite good during the first half of the quarter, when the index aggregate added 1% and **crossed the 8% outperformance mark** for the first time since the indices went live. In the first week of May, European Value indices started to underperform and **iSTOXX Value lost ~3,5% in relative terms towards the end of the quarter,** dragging the single index aggregate into its **first quarterly loss of 0,05%** since they are live (see more details at the end of the report).



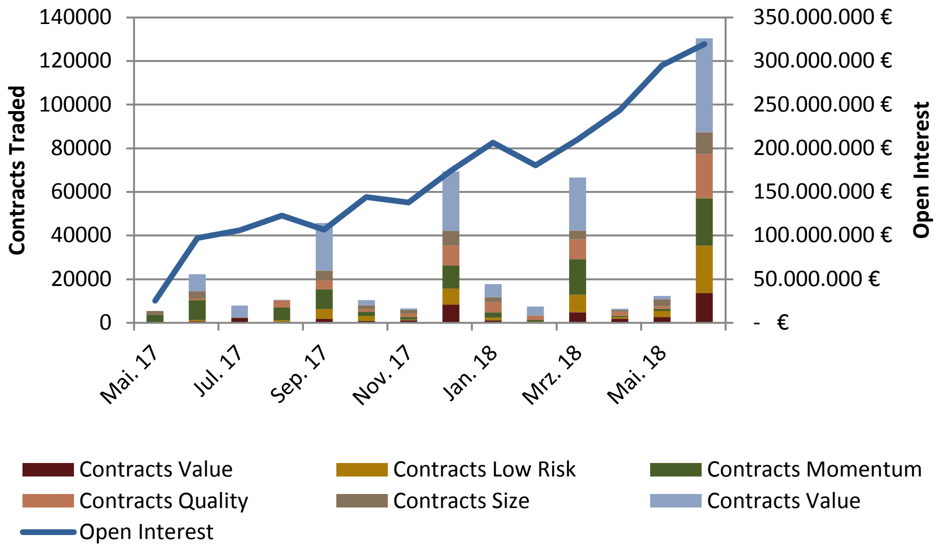
Excess returns vs. benchmark

	quarter to date	year to date	"Going Live"
Value	-3,60%	-3,66%	2,64%
Carry	2,41%	3,99%	13,88%
Quality	0,25%	0,05%	1,27%
Momentum	0,18%	0,76%	8,44%
Low Risk	0,36%	3,14%	7,46%
Size	-1,30%	0,73%	10,16%
Multifactor	-2,16%	-0,71%	-0,23%

as of: 29.06.2018

EUREX futures on iSTOXX single factor indices

Traded contracts and Open interest are still on the rise. Traded volumes surpassed the 2.5 bln Euro mark and Open interest increased to more than 300 mln. in May.



AMUNDI ETF on iSTOXX Europe Multi-Factor Market Neutral

The ETF has been in the spotlight on several occasions during the quarter, received two awards from L´Agefi and was highlighted by Global Investor Groups excellence awards. During the quarter, AUM surpassed the 600 mln mark for the first time.

Amundi ETF iSTOXX Europe Multi-Factor Market Neutral UCITS ETF was crowned by l'Agefi with the European ETF Innovation Award 2018 in the Equity category[1].

This innovative exposure[2] enables to capture European equity risk premia with a market neutral stance[3].

ETF/ PASSIVE MANAGER OF THE YEAR:

AMUNDI

Amundi manages a total of over €1.4 trillion of which the ETF, Indexing and Smart Beta business accounts for about €90 billion. The Amundi ETF business recorded 50% organic growth in 2017 with assets under management increasing to €38 billion.

More recently, the Amundi ETF arm has passed €40 billion, making it the fifth largest ETF platform in Europe.

The increase in assets under management represents a doubling of net new assets compared to 2016, and was driven by successful exposures (floating rate notes, multi factor, emerging equities) as well as significant product innovation.

The French firm launched in late 2017 the Amundi ETF iSTOXX Europe Multi-Factor Market Neutral UCITS ETF which seeks to replicate the performance of the "strategy" index iSTOXX Europe Multi-Factor Market Neutral.

This ETF aims to capture the potential long term outperformance of market's risk premia while offsetting the European equity markets' movements, the firm said.

The Amundi ETF business leverages the company's long history in and experi… struction.

Handlin… tailored in… nised for t… knowledge… Amundi'… as it brings… resources … gaining po… tions busin…

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Récompense

Paris, 24/05/2018 - Amundi ETF remporte 3 Actifs d'Or de la Distribution et l'Actifs de Bronze de l'Innovation lors de la cérémonie des Actifs du Patrimoine 2018, organisée par l'Agefi. Remis dans le cadre d'une soirée qui s'est tenue le jeudi 24 mai à Paris, les trois Actifs d'Or de la Distribution 2018 ont été attribués à :

- **Amundi ETF MSCI Emerging Markets UCITS ETF-EUR dans la catégorie « Actions ETF »**
- **Amundi ETF Floating Rate USD Corporate UCITS ETF dans la catégorie « Obligations ETF »**
- **Amundi ETF FTSE Italia PIR UCITS ETF DR dans la catégorie « ETF de moins d'un an ».**

Enfin, **Amundi ETF ISTOXX Europe Multi-factor Market Neutral UCITS ETF a reçu l'Actif de Bronze de l'Innovation.** Ce prix récompense l'innovation et l'originalité du produit lancé ou enrichi entre le 3 avril 2017 et le 31 mars.

Amundi ETF iSTOXX Europe Multi-Factor Market Neutral UCITS ETF vise à capter les primes de risque actions sur le long terme tout en se protégeant des mouvements de hausse et de baisse du marché. Cet ETF innovant connaît un fort succès commercial et affiche des encours de plus de 590 millions d'euros en six mois seulement.

Alpha Centauri Indexing - Data as of 29.06.2018

Description:

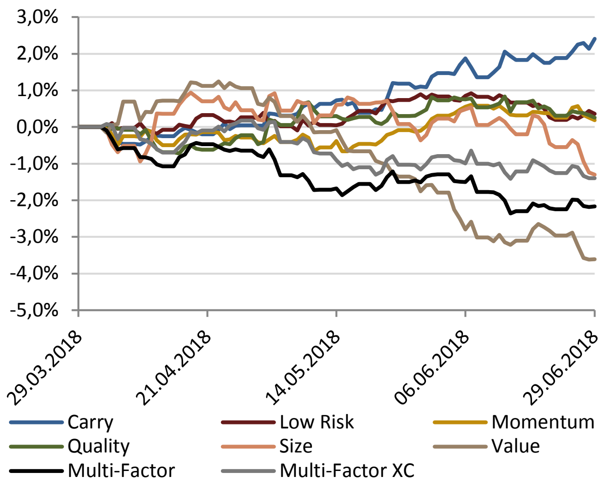
The iSTOXX Europe Single Factor index family developed by STOXX in collaboration with Alpha Centauri offers investors a unique and very innovative way to target and capture premia. It consists of six single factors that aim to capture well-known risk premia and one multi-factor that aims at simultaneously 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 **www.alpha-centauri.com** or **www.stoxx.com**

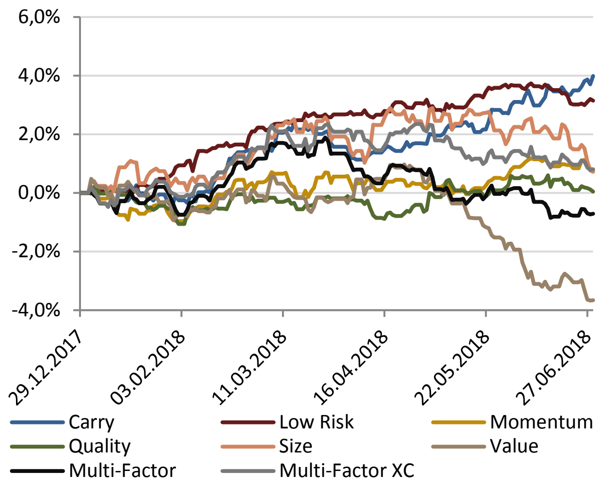
Performance and Volatility Breakdown

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	6,4%	3,6%	9,2%	36,2%	14,8%	13,2%
Low Risk	ISERRER Index	4,3%	2,8%	6,9%	29,7%	13,6%	12,2%
Momentum	ISEMFER Index	4,2%	0,4%	7,3%	30,7%	14,4%	12,8%
Quality	ISEQFER Index	4,2%	-0,3%	5,1%	23,6%	14,5%	13,0%
Size	ISEZFER Index	2,7%	0,4%	4,3%	32,4%	14,8%	13,4%
Value	ISEVFER Index	0,4%	-4,0%	-0,9%	24,9%	15,4%	13,6%
Multi-Factor	ISEXFER Index	1,8%	-1,1%	3,0%	22,1%	14,0%	12,5%
Multi-Factor XC	ISEXFCR Index	2,6%	0,5%	4,9%	27,1%	14,3%	12,6%
Benchmark	SXXR Index	4,0%	-0,3%	2,6%	22,3%	14,7%	13,0%

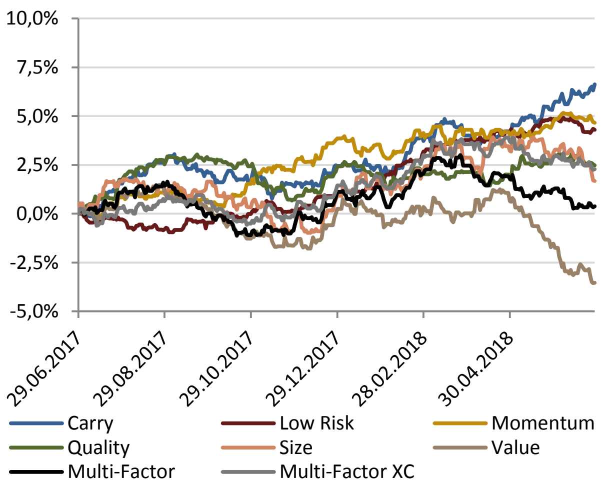
Excess Return 3 Months



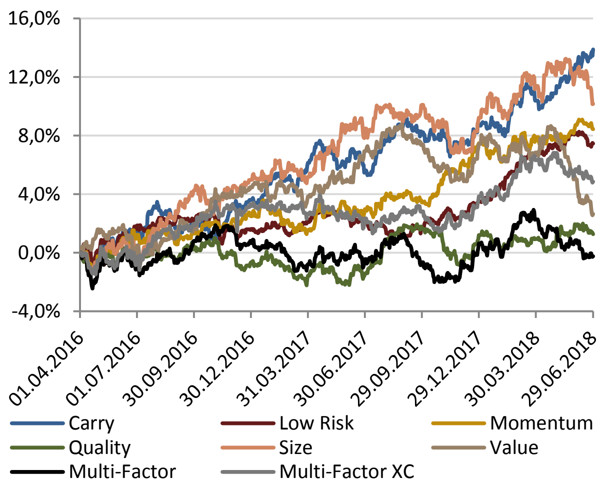
Excess Return 6 Months



Excess Return 12 Months



Excess Return since going Live (1.4.)



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