ALPHA CENTAURI

Rethinking Multi Asset

Searching for better beta vs. searching for alpha

Brighttalk
Multi Asset Summit
December 2021

Brighttalk Multi Asset Summit

Major themes

Overview	
Low or negative yields, weaker equity returns ahead	• **Alternative sources of return** ➢ Traditional and alternative risk premia in one portfolio ➢ “Searching for better beta” instead of „Searching for Alpha“
Loss of diversification opportunities	• **New sources of diversification** ➢ Expanding the opportunity set ➢ use of leverage for diversification purposes instead of simple amplification
Investment process	• **Total Portfolio Approach** ➢ more efficient than traditional asset allocation in combination with „stop loss“ ➢ all sources of return in a permanent battle for a weight in the portfolio ➢ Risk-based allocation
Objectives	• **better Return-/Risk-Trade Off** ➢ stable cash flows / dividend distributions ➢ targeted portfolio-risk

Who we are

Investmentboutique - pioneering Alternative Risk Premia and Equity Factors

Founded in 2005 – experience in equity factor investing since 2009	
2005 / 2006	Company founded by Wilfried Boysen (former member of the managing board of Tchibo and AMB Generali, member of the supervisory board of Postbank), launch of „Alpha Centauri Aktien“ fund
2007 – 2009	First investments in our own factor-based equity strategies (long only & market neutral)
2010 / 2011	Factor-based investments exceed € 300 Mio; implementation of FIS APT (formerly SunGard APT); Introduction of REUTERS MQA Point-in-Time, „R“, and FIS APT risk model history, launch of bond-premia strategies; 11 employees
2012 / 2013	Initial launch of factor-testing and simulation infrastructure; implementation of market-neutral equity low risk strategies; € 2,8 bln. AuM
2014 / 2015	Founder and owner of the company announces retirement for 2015, MBO by core management and investment team; strategic reorganization and focus on liquid-alternative products and factor-investing strategies; Alpha Centauri allures STOXX and FIS (APT) for strategic partnerships
2016	Company rebranded as Alpha Centauri Investment Management, Alpha Centauri Risk GmbH founded, Introduction of iSTOXX Europe factor indices by STOXX
2017	Alpha Centauri allures SouthPoleGroup for a strategic cooperation, „Going Live“ of iSTOXX Europe Market Neutral factor indices, EUREX introduces first European factor futures on iSTOXX Europe indices, AMUNDI launches (worldwide) first market neutral factor ETF on iSTOXX Europe Multifactor; Equity Europe Long/Short introduced, DekaBank unveils first certificate on the strategy
2018 / 2019	AC Equity Europe Long/Short launched; AMUNDI win´s several innovation awards (L´Agefi / Global Investor Awards) for the marketneutral ETF; Vontobel bond on Equity L/S strategy issued; Diversified Income strategy launched; factor strategies exceed 800 mln. Euros for the first time

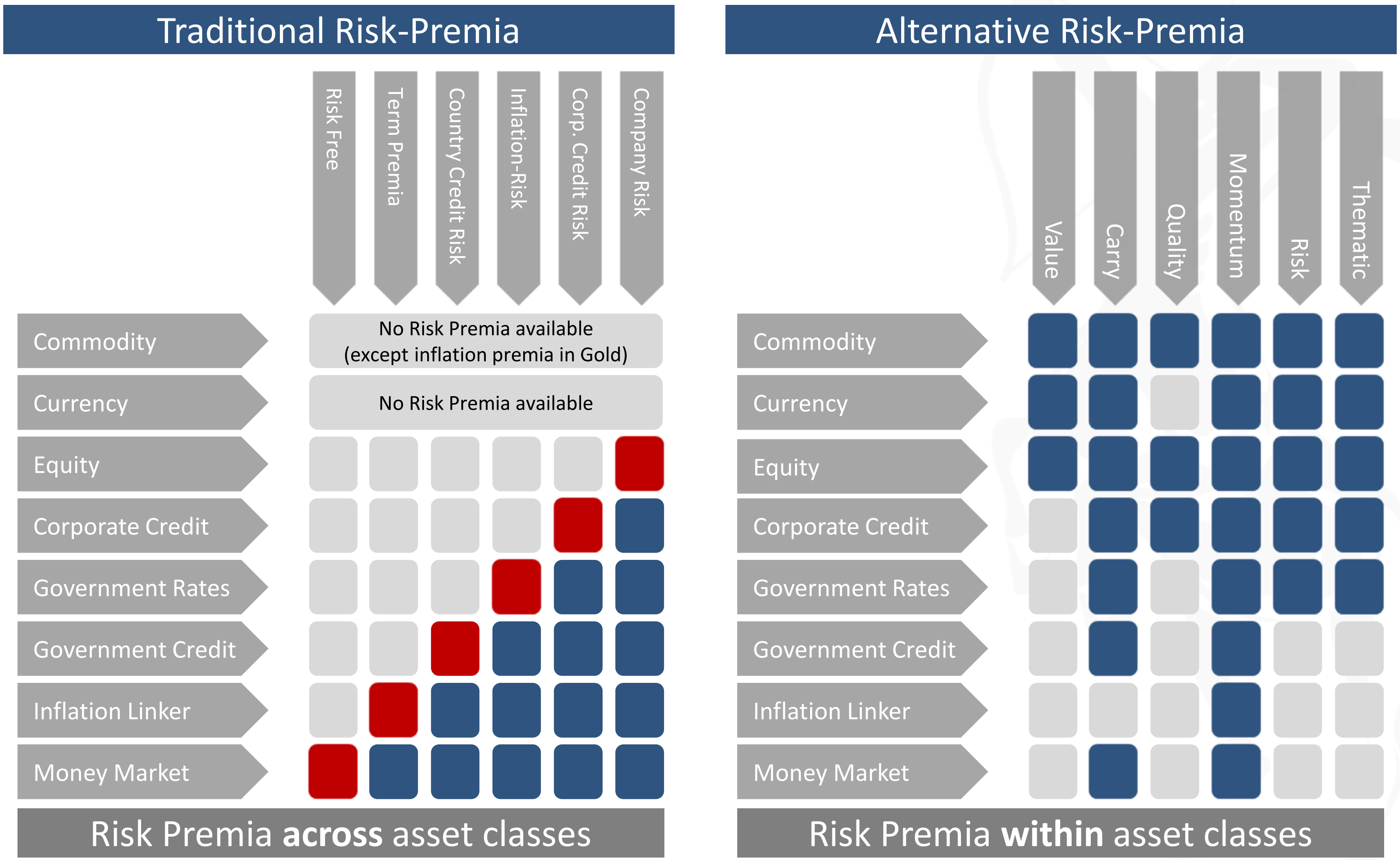
Who we are

Alpha Centauri works for and with leading players in financial services

Explore our world class network

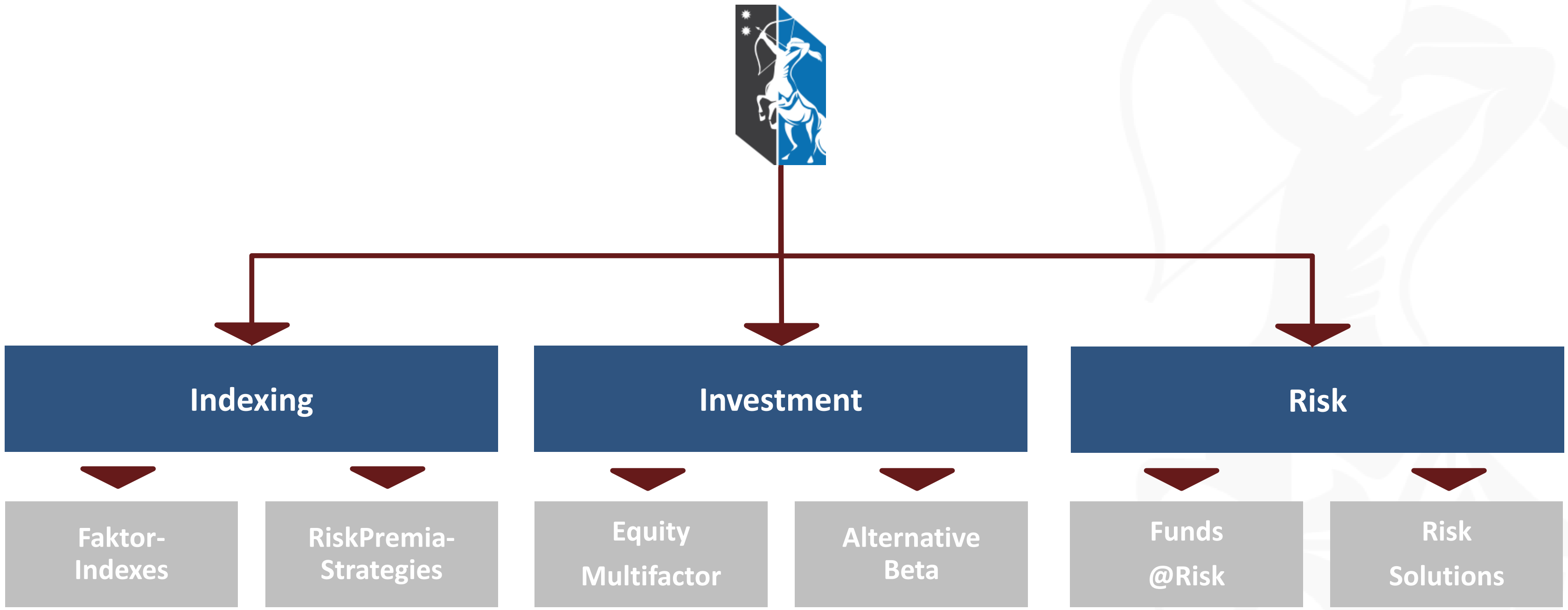
What we do

Our work is deeply-rooted in a risk-factor framework



What we do

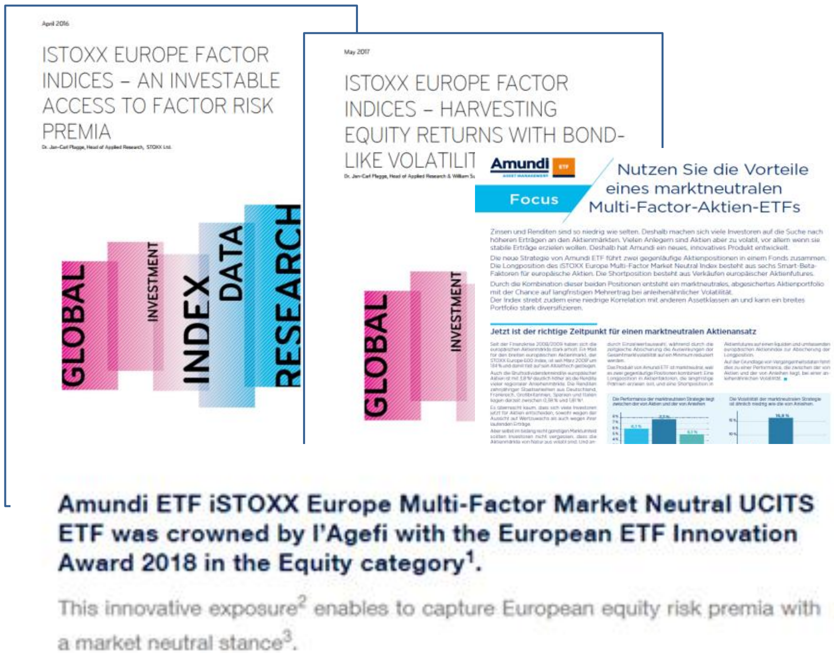
Client centric solutions delivered via three lines of activities



Indexing

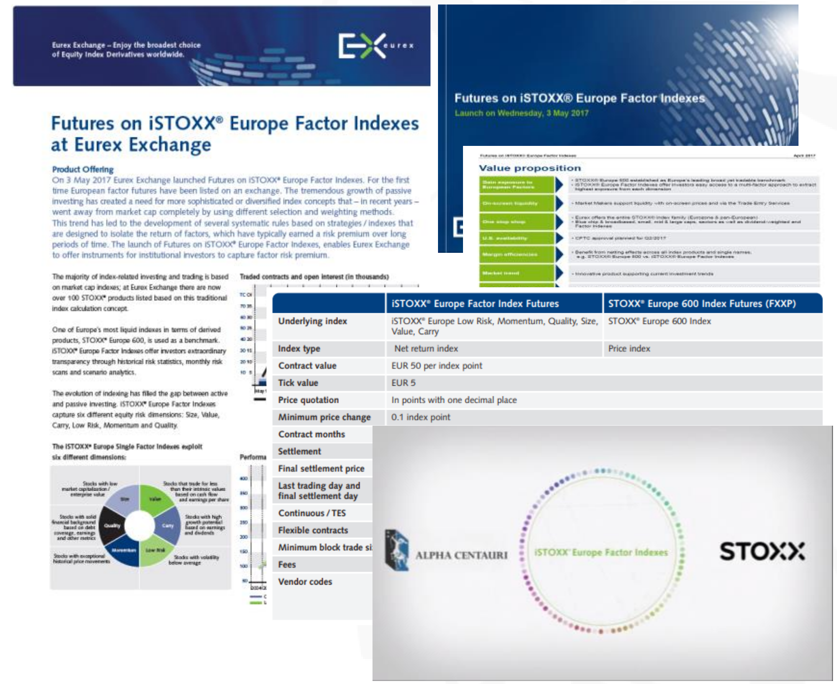
iSTOXX Europe Factor Indices – powered by Alpha Centauri

STOXX releases



"We are delighted to collaborate ***with Alpha Centauri*** *in developing the iSTOXX Europe Factor Indices. As part of the index family, the iSTOXX Europe Single Factor Indices offer a very unique and innovative way to capture risk premia while simultaneously minimizing distortions," said Matteo Andreetto, chief executive officer, STOXX Limited.* (AC Press release, 2016)

EUREX publications



"The new futures are based on the iSTOXX® Europe Factor index family developed by STOXX® in collaboration with ***Alpha Centauri*** *and offer investors a unique and innovative way to target and capture premia."*

Investment

Alternative Risk- and Factor Premia / Climate Smart Investments

Risk-/Factor-Premia publications

„Alternative Risikoprämien sind eine der wenigen Möglichkeiten, im liquiden Bereich noch Erträge zu erzielen. Aufgrund ihrer spezifischen Eigenschaften (kleinere Drawdowns, schnelleres Recovery, weitestgehend unkorreliert) sind sie ein idealer Bond-Ersatz.

Climate research (with ISS ESG)

*"Comprehensive **carbon data** can help generate financial outperformance and investing in line with a 2-degree scenario is a clear opportunity for value creation ….. These are the findings of the recently published paper by South Pole Group, global sustainability solutions provider, and **Alpha Centauri**, the Hamburg-based boutique asset manager, who today announce their partnership." (SPG press release / RESPONSIBLE INVESTOR)*

Risk

Alpha Centauri utilizes FIS/APT risk models and holds a partnership with FIS

FIS Client Story

CASE STORY

UNCOVERING FACTOR BETA FOR ALPHA CENTAURI'S INVESTORS

Alpha Centauri, a Hamburg-based investment boutique started to invest in market-neutral, single-factor strategies, including earnings momentum, balance sheet quality and dividends in 2009. After three years of outperformance, its investments had topped €300 million by 2012.

While Alpha Centauri was confident in its bottom-up investment style, it soon found itself exposed to unexpected macro risks. The euro crisis severely impacted its portfolio returns.

Alpha Centauri worked closely with our investment risk experts to develop a research and portfolio construction infrastructure to address risk issues. This approach allowed Alpha Centauri to create, test and launch new factor index products in collaboration with STOXX, a

Can you solve this equation?

Innovative investment boutique – 1 Eurozone financial crisis + 1 award-winning investment risk technology partner

The answer...

1 partnership that resulted in a new series of successful European factor indices and highly focused risk solutions for asset managers

***ALPHA CENTAURI** worked closely with our investment risk experts to develop a research and portfolio construction infrastructure to address risk issues. This approach allowed Alpha Centauri to create, test and launch new factor products …*

FIS - Press Release

Empowering the Financial World FIS

FIS APT is pleased to announce the following addition to our models:

IMPROVEMENT

*"We have added **iStoxx Europe Equity Factor indices** to our models as part of our explanatory factors offering.*
*These indices were constructed by iStoxx in conjunction with our partner and factor investing specialist, **Alpha Centauri.***
The factors seek to capture six key risk premia - Value, Carry, Momentum, Size, Low Risk, and Quality…….

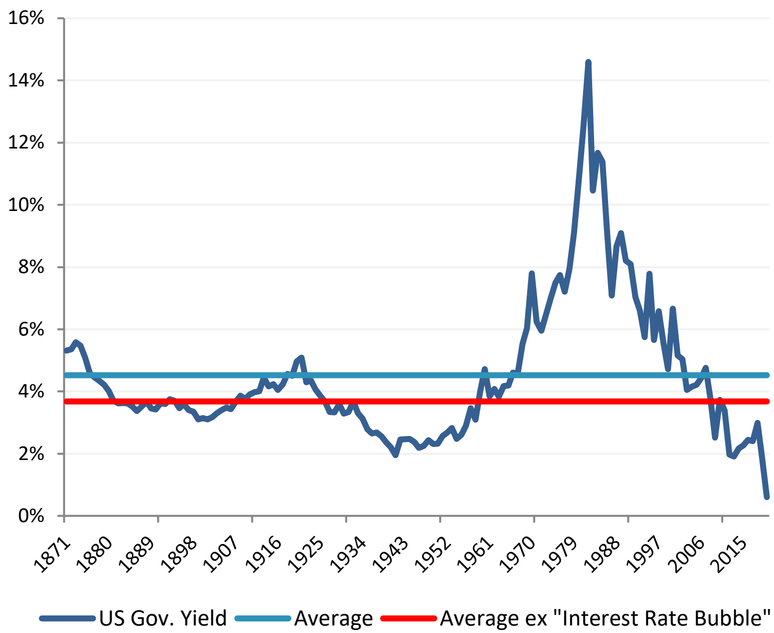
ALPHA CENTAURI

The Challenge

Status Quo

Low or negative bond yields expected to persist for at least one generation

US-yield (10 y.) 1871-2020*



Central bank independence violated

- Low yields are more the rule than the exception
- Average long run US Government 10 yr. average at 3,6% (ex bubble)

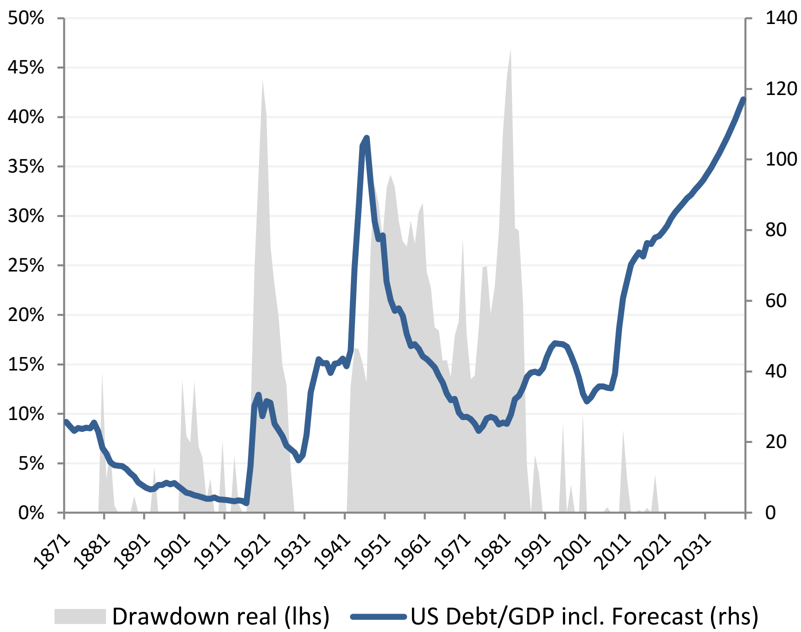
- Yield- or yield curve control in form of quantitative easing is the replacement of US-yield ceiling during the 50´s of last century

* Quellen: R.Shiller/Yale; eigene Berechnungen

Status Quo

Long period of negative real returns from fixed income quite likely

US Debt/GDP and real drawdown



COVID-19 additional problem

- 110 % Debt/GDP after WW II
- led to 40 years of real drawdowns in US-government bonds from 1944-85

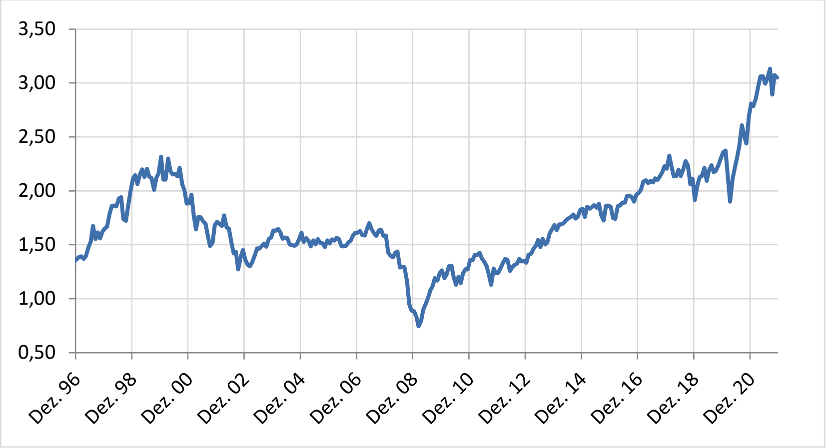
- Long term debt/GDP reduction via „financial repression" most likely scenario
- 25-40 years real drawdown at today´s yield- and inflation rates quite likely

* Quellen: R.Shiller/Yale; US Congress Budget Office, eigene Berechnungen

Status Quo

Expected returns in equities seem to be low due to high valuations*

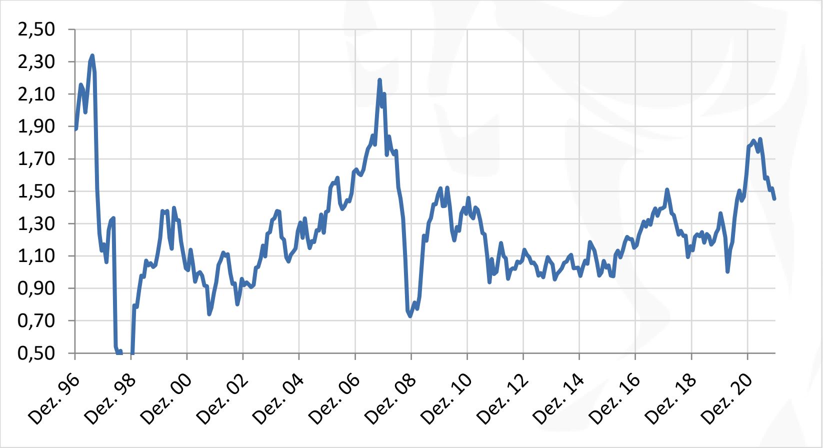
USA



Europe

Japan

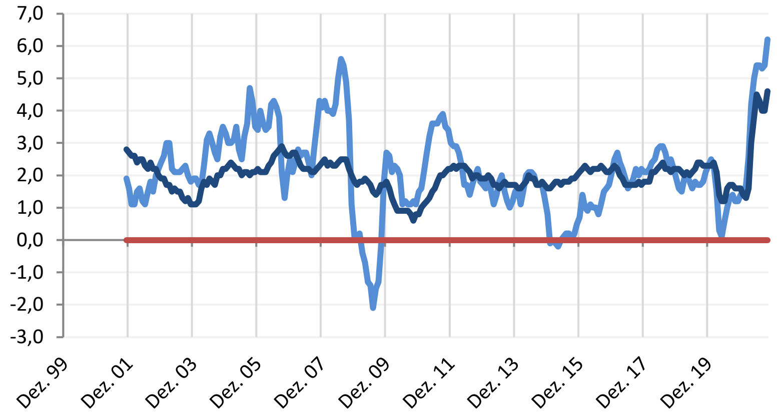
Emerging Markets



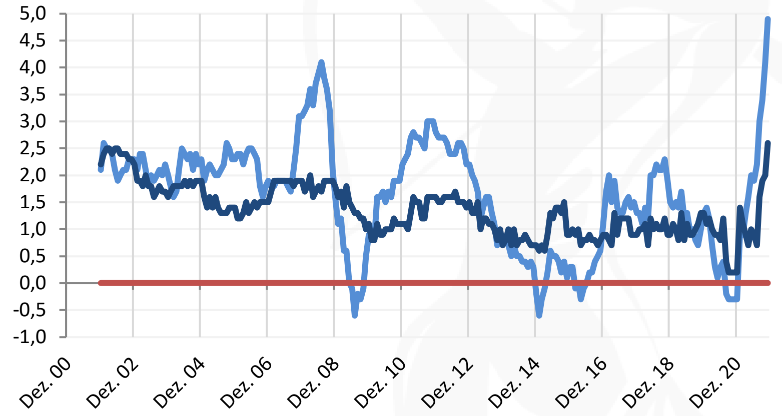
* prices/sales ratio

Status Quo
Structural higher inflation rates or transitory blip?

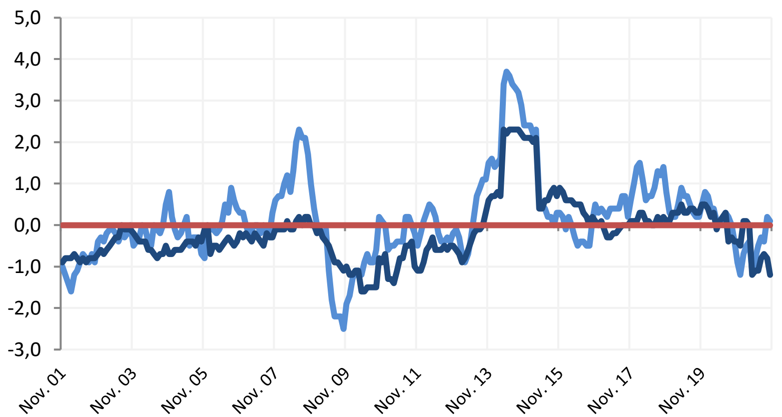
USA



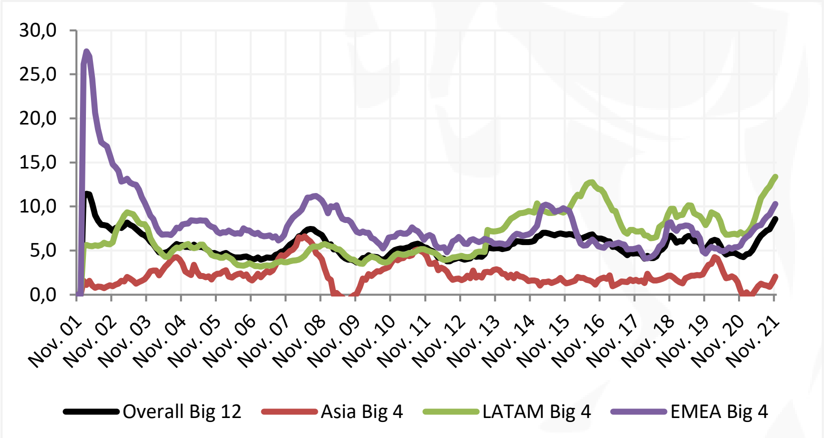
Eurozone



Japan



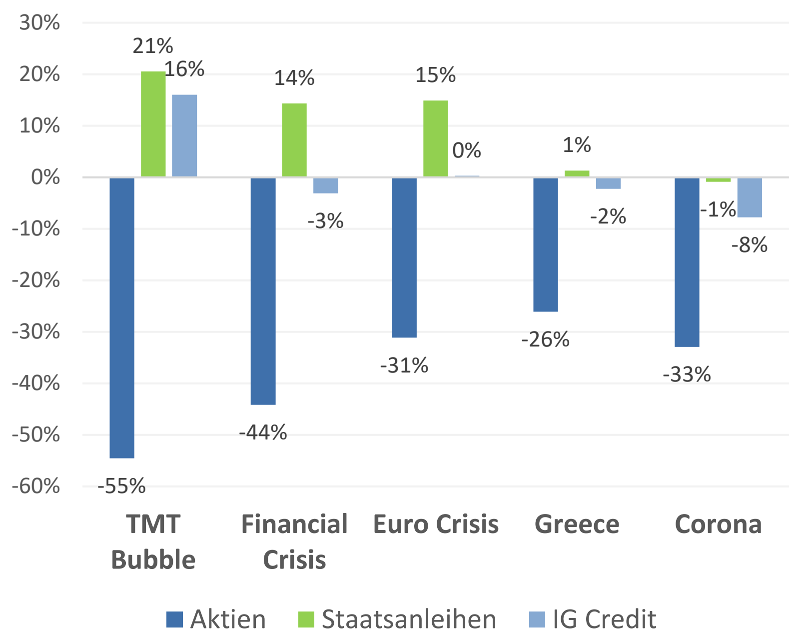
Emerging Markets



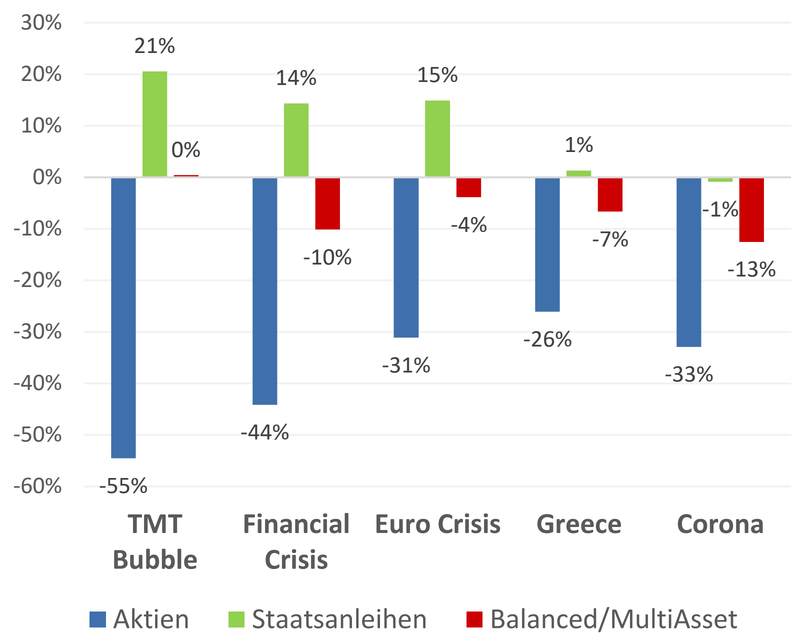
Status Quo

Bonds lost most of their diversification benefits over the last couple of years

Bonds – „return-free risk“



Higher drawdowns in Multi Asset

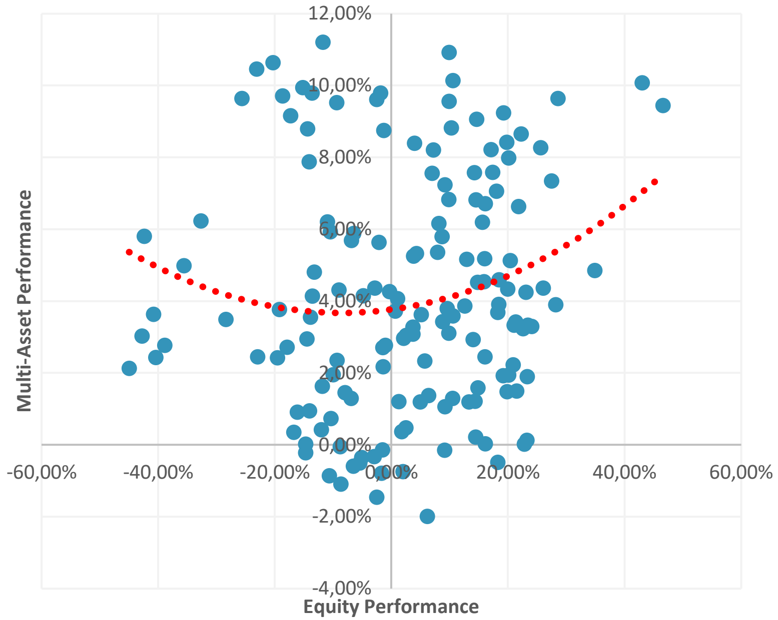


- low yields are a drag on diversification benefits of credit risk free government bonds
- performance declined with every drawdown in equities
- compared to former times, investors will have to reduce risky assets or have to look for new sources of diversification

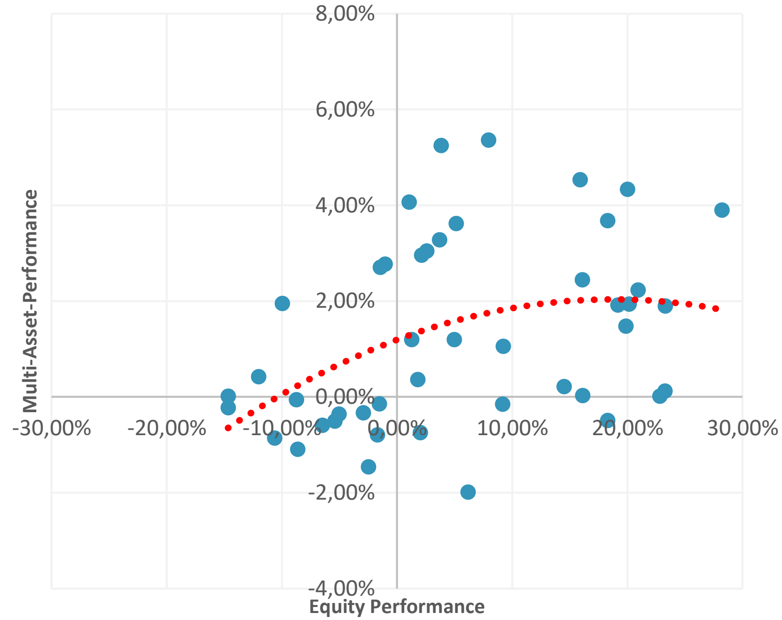
Status Quo

Risk profile of Multi-Asset/Balanced versus equities changed dramatically

Return-/risk profile 1988-2015



Return-/risk profile 2015-2020

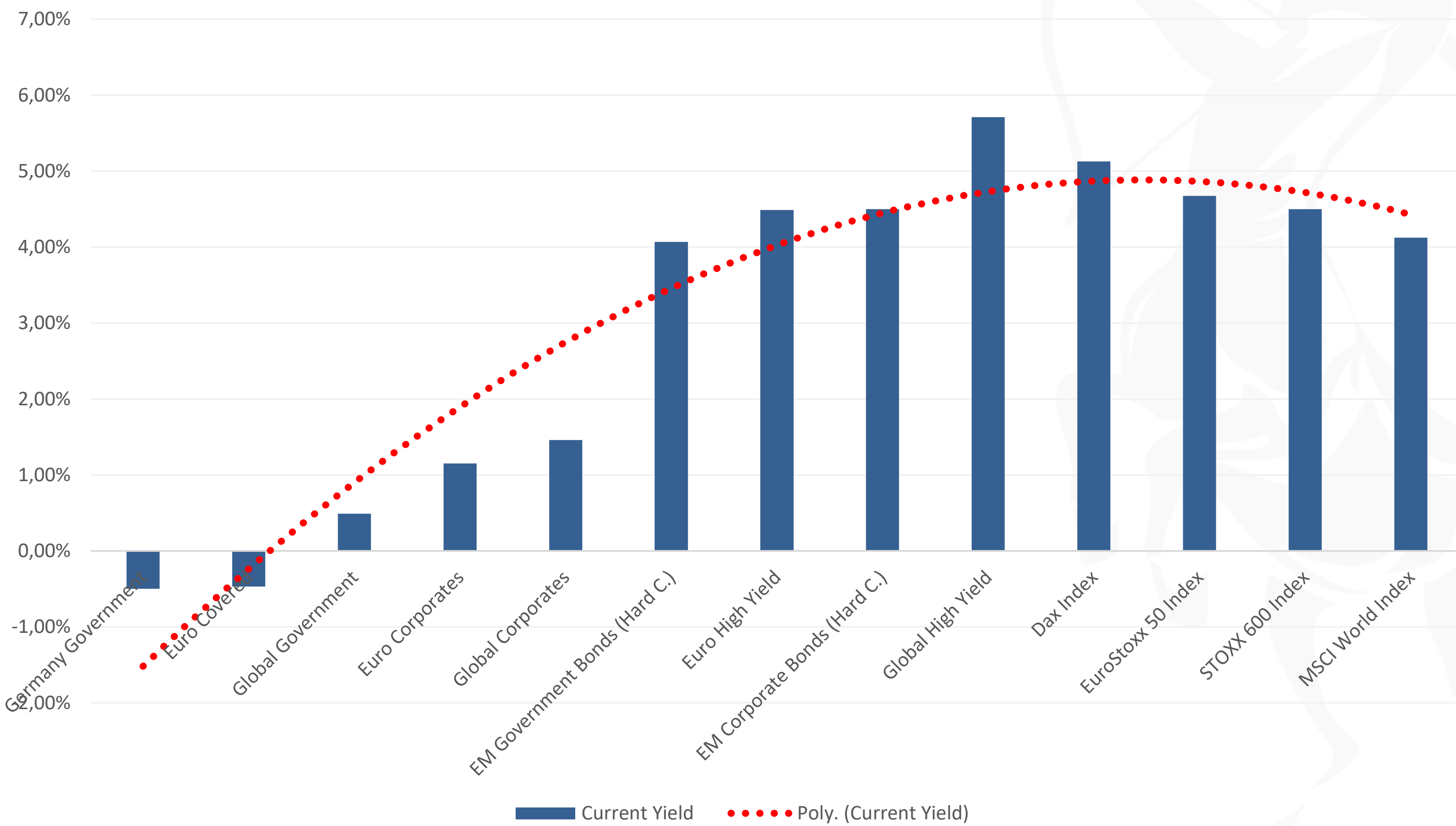


- upside potential more limited due to low and rising yields during phases of rising equities
- partizipation rate during equity downturns massively increased
- profile more „short put“- than „long strangle“-like

Status Quo

Outlook: low returns in standard Multi Asset between 1,5% and 3,0%

Performance expectations for traditional assets over the next five years*

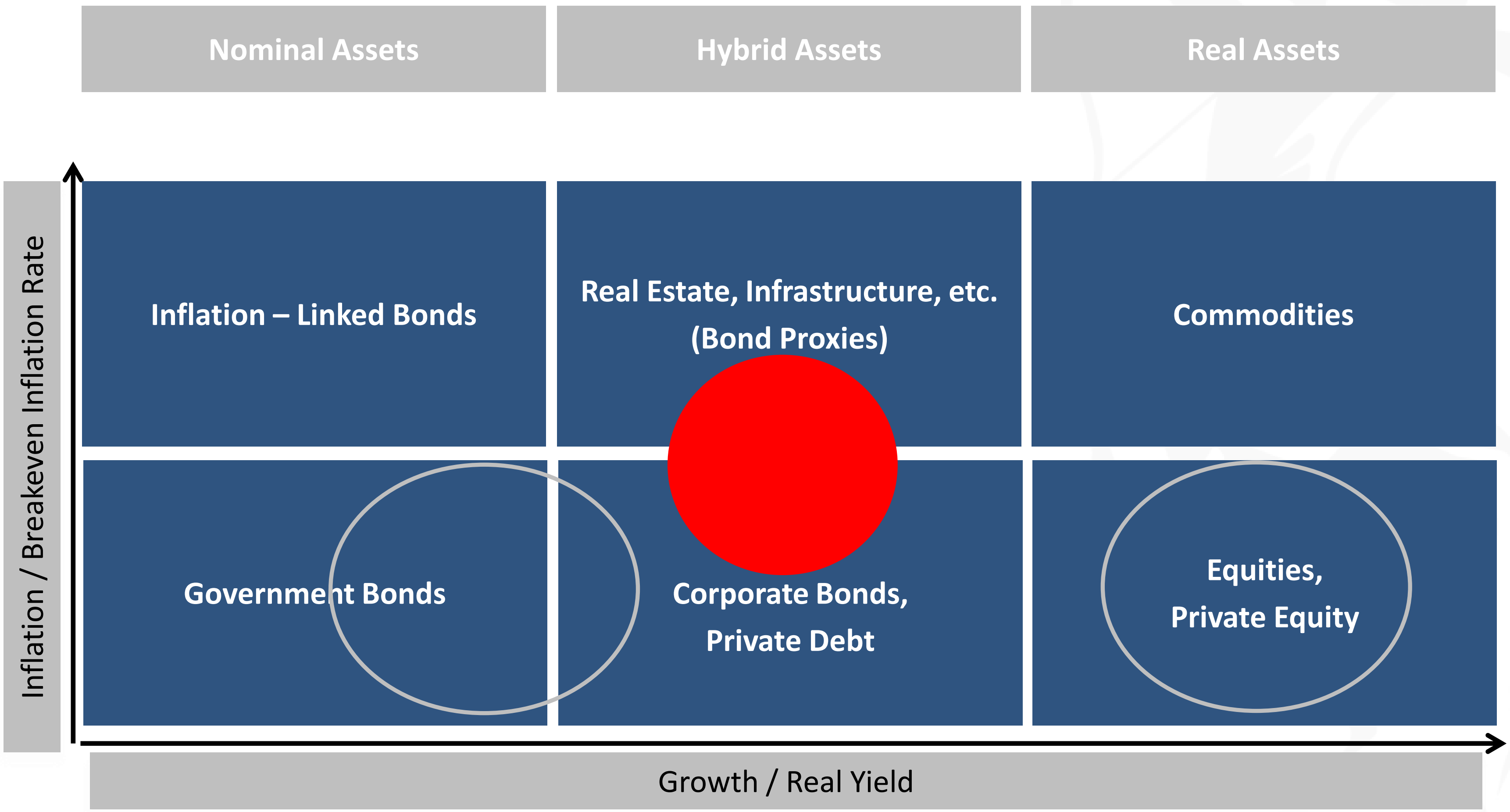


* Based on current bond- and earnings yields

Status Quo

Positioning in times of “financial repression” and higher inflation rates

Performance of traditional asset classes depends on real yield/inflation– trade off



Status Quo

Why searching for “better beta” than searching for “alpha”

Results from a Northern Trust portfolio study among institutional portfolios

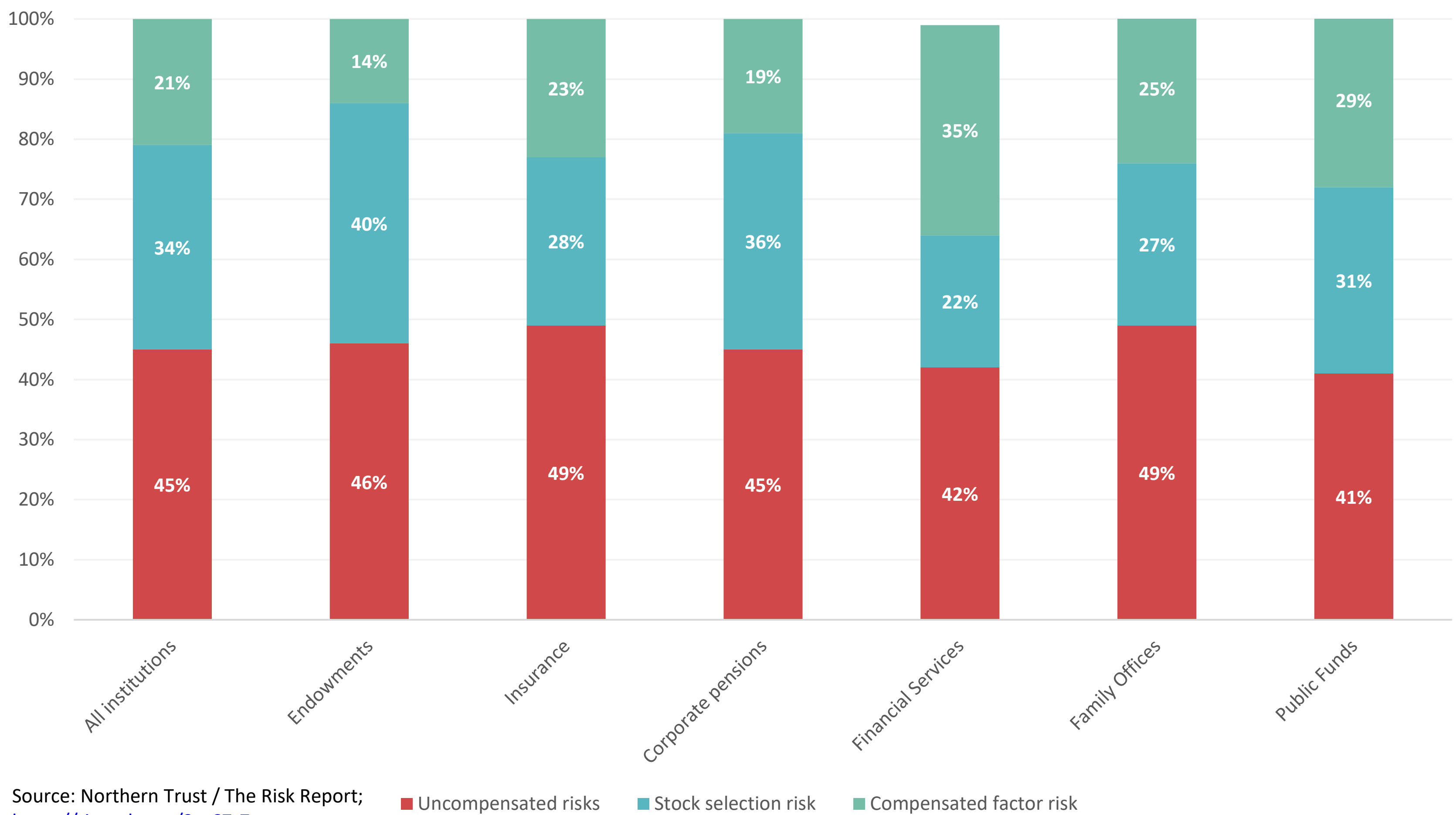
Institutions had nearly 2x more uncompensated vs. compensated risk	**Underlying portfolio holdings cancelled each other out – and hurt performance**	**Hidden portfolio risks caused unintended outcomes**
Conventional „Style Investing“ led to index-like performance with higher fees	**„Over-diversification“ diluted performance**	**Possible attempts to „time“ manager changes may have proved costly**

Source: Northern Trust / The Risk Report;
https://tinyurl.com/3sy67t7a

Status Quo

Searching for alpha leaves a lot of “uncompensated risks” on the table

Nearly 50% of active risks in institutional portfolios are „uncompensated“



Source: Northern Trust / The Risk Report;
https://tinyurl.com/3sy67t7a

ALPHA CENTAURI

The Alternative

Alternatives

Opportunities to improve performance

„Better Beta“ in combination with active management seems to be a better choice	
Taking more risk	• A move to the right on risk-/return curve • sell : Government bonds/InvGr.-Corporates • buy: High Yield and equities ➢ ***Increase equity beta***
More active management	• needs improved skill sets or • higher process frequency all else equal ➢ ***Searching for alpha***
Expand investment universe	• more opportunities leads to better performance all else equal • improvement only in case of low correlations ➢ ***Searching for „better beta“***
Deploy Leverage	• positive, if leverage is implemented for diversification than for amplification • the “W. Buffett approach” ➢ ***Searching for „better beta“ as well***

Solution
Multi Alternative: expanding the opportunity set

Overview	
Universe	**Expanded investment universe** • Fixed Income: Private Debt, Insurance Linked, Asset Backed • Real Assets: Private Equity, Real Estate, Infrastructure, Agriculture, Commodities • Others: Alt. Risk Premia, Hedge Funds, CryptoAssets, Int. Property
Investment-/Risk- Process	**Total Portfolio Approach** • Active investment- and manager selection process • Active and factor-based risk process; target-volatility concept • moderate leverage for more diversification instead of amplification
Goals	**Stable income** • Target performance ~6-8% p.a.; dividend distribution of ~ 3-4% p.a. • Target volatility 7%-10% • Monthly liquidity
Benefits	**Improvement of total return and diversification** • ….without compromizing the risk structure of current investments • State of the art risk concept (risk-factor allocation) • Exploiting the ESG opportunites

Investment Universe

Broad universe to improve performance, diversification and ESG opportunities

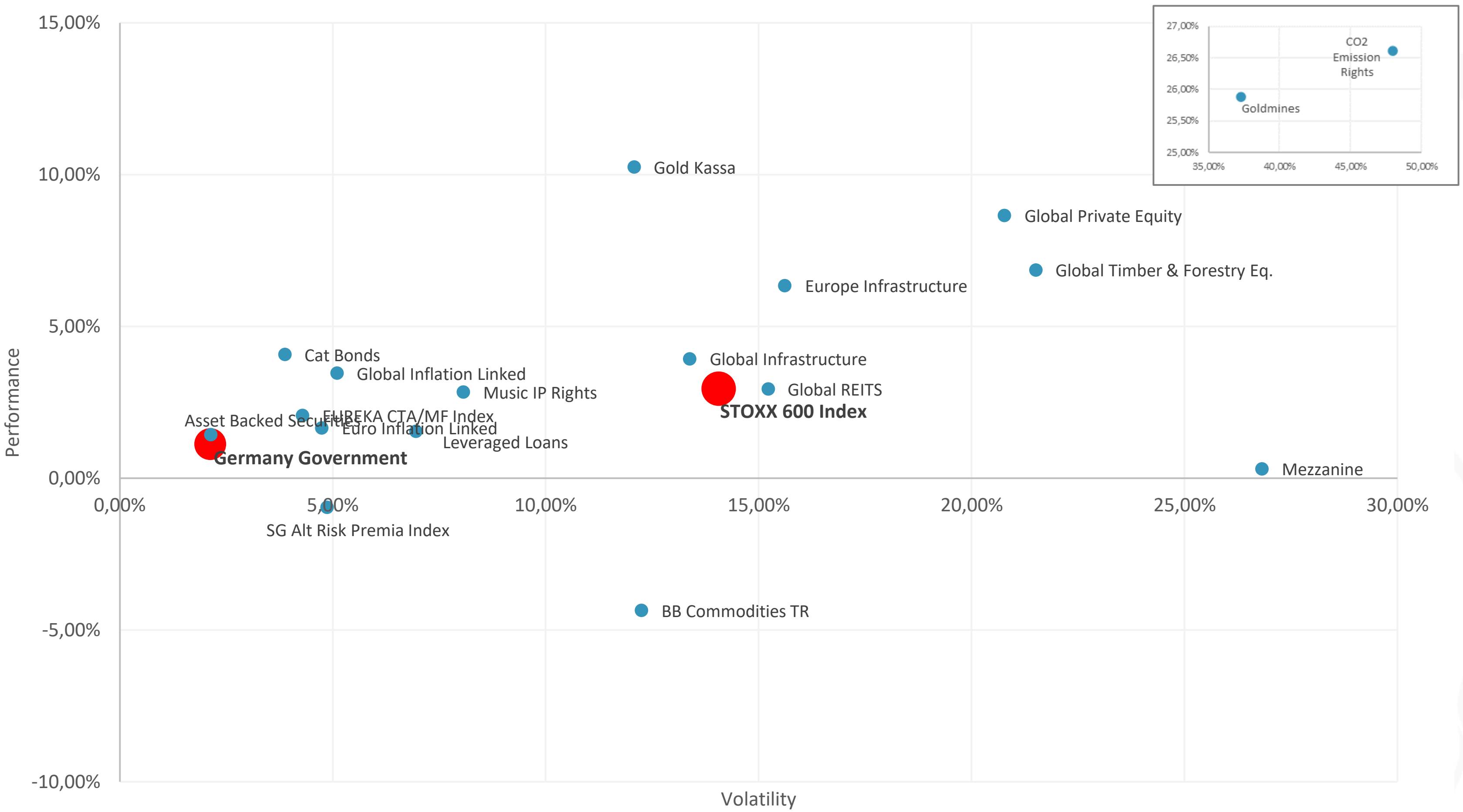
Corporate	Real Estate	Infrastructure	Agriculture	Commodities	Other
Private Equity*	Residential*	**Transport / Traffic**	Farmland*	**Precious / Ind. Metals**	**Alt. Risk Premia**
Venture/Buyout	Micro Housing*	Roads/Bridges/Air-ports/Railway	Timber/Forest*	Gold/Silver/Copper etc.	Value/Carry/Momentum /Quality/Low Beta*
Private Debt*	Retail/Shopping	**Public Utility**	Aquaculture*	**Energy**	**Hedge Funds**
Trade Financing / Bridge Financing/Microfinance	Industrial	Oil/Gas/Energy/Water/LD Heating*		Oil/Nat Gas/Electricity	CTA/ Managed Futures etc.
Insurance Linked*	Office Space	**Renewable Energy**		**Environmental Markets**	**Crypto Assets**
Cat Bonds, Life Insurance	Data Centers*	Solar/Wind/Hydro-power/Charging Networks*		Carbon/Biomass*	Bitcoin etc.
Asset Backed	Hospitals/Retirement Homes*	**Communication**		**Rare Earth Elements**	**Intellectual Property**
Credit Card Debt, Auto Loans, Student Loans	Logistics/Storage	Fixed/Mobile/Data		15 Lathanides/ Scandium/Yttrium*	Music rights etc.*
Funds, Derivatives, Direct Investments	Funds, Direct Investments	Funds, Direct Investments	Funds, Direct Investments	Funds, Derivatives, Direct Investments	Funds, Derivatives, Direct Investments

*Opportunities in sustainable /ESG-investments

Investment Universe

Alternative Investments offer more return and diversification

Alternative assets achieved better returns than traditional assets since 2015



Investment Process

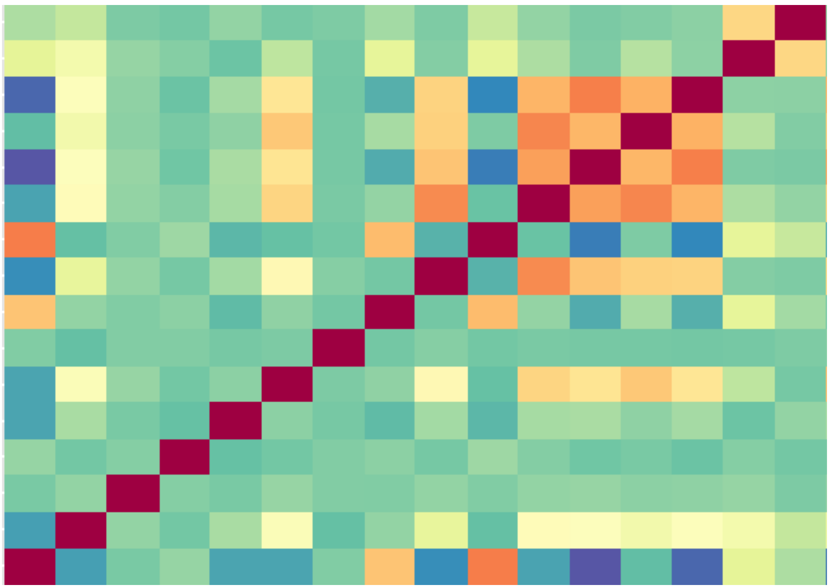
Total Portfolio Approach – a better way to achieve desired outcomes

Advantages: more adaptive, better decision-making, integrated risk process		
	Traditional Multi Asset	**Total Portfolio Approach**
Performance comparison	Benchmark/Peergroup	Fund/portfolio objectives
Measurement of results	Relative to benchmark	Total Return, Portfolio objectives Return vs. risk-budget
Opportunity Set	Asset classes	Contribution of every investment to Total Return
Diversification by	Asset classes	Sub asset classes, Risk factors isk Mitigation –Strategies
Decision making	Comitee	Portfolio manager
Implementation	Specialist teams combat for portfolio weights	Portfolio manager via risk-based allocation

Investment Process

Low correlations within alternatives ideal for an active approach

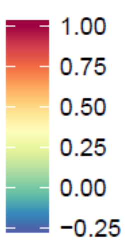
Low correlated Alt. Investments



Better Return-/Risk-Tradeoff

	Passive approach (Rebalancing only)	Active Approach (Momentum*)
Return p.a.	16,27%	19,27%
Volatility	9,26%	9,25%
Sharpe Ratio	1,76	2,08
Average no. positions	28	14
Max. Drawdown	-27,19%	-23,73%
Calmar Ratio	0,33	0,39

Correlations



Low correlations within the alternative space an ideal playing field for active approaches

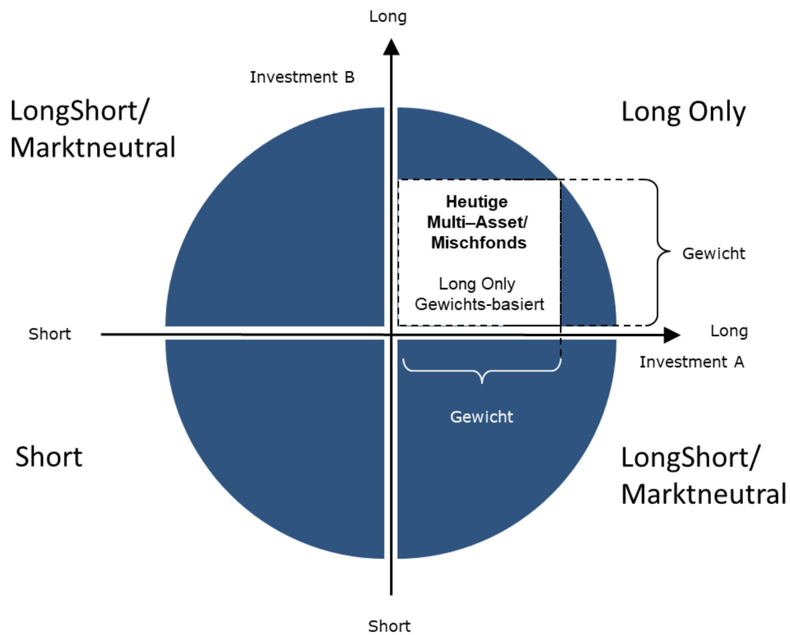
- Performance improvement
- Similar volatility but lower max. drawdown
- Higher Sharpe- and Calmar-Ratios
- More „high conviction“- positions (cost reduction)

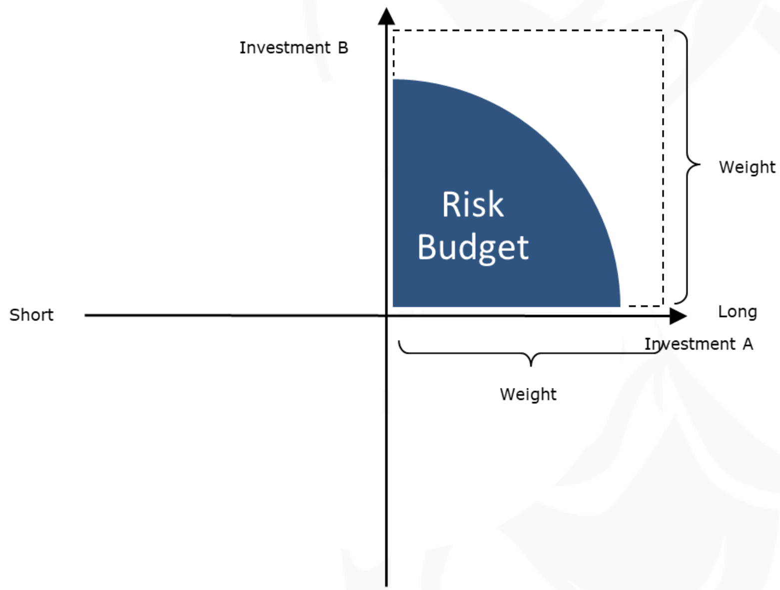
*for simulation purposes

Investment Process

Investors should rethink “Long Only constraints”….

Wasted opportunities (blue)..	.. and „unintended risks“





- „Wasted Opportunities“ because of long only- and leverage constraints
- „Unintended Risks“ because of allocations made alongside weights instead of risk
- Risk Management mainly based on “stop loss” critical
- Result: high opportunity-costs because of „buy high“/„sell low“

Investment Process

… as well as "leverage aversion" to expand the opportunity set

Buffett´s Alpha = Leveraged Factor Beta

Leverage to diversifiy not to amplify

Buffett's Alpha

Andrea Frazzini, David Kabiller, and Lasse Heje Pedersen*

Financial Analysts Journal, **forthcoming**

This draft: June 15, 2018

Abstract
Berkshire Hathaway has realized a Sharpe ratio of 0.79 with significant alpha to traditional risk factors. However, the alpha becomes insignificant when controlling for exposures to Betting-Against-Beta and Quality-Minus-Junk factors. Further, we estimate that Buffett's leverage is about 1.7-to-1 on average. Therefore, Buffett's returns appear to be neither luck nor magic, but, rather, reward for leveraging cheap, safe, quality stocks. Decomposing Berkshires' portfolio into ownership in publicly traded stocks versus wholly-owned private companies, we find that the former performs the best, suggesting that Buffett's returns are more due to stock selection than to his effect on management.

JEL Classification: G11, G12, G14, G22, G23
Keywords: investments, market efficiency, leverage, quality, value, betting against beta

* Andrea Frazzini and David Kabiller are at AQR Capital Management, Two Greenwich Plaza, Greenwich, CT 06830, e-mail: andrea.frazzini@aqr.com; Lasse H. Pedersen (corresponding author) is at AQR Capital Management, Copenhagen Business School, and CEPR. We thank Cliff Asness, Aaron Brown, John Howard, Ronen Israel, Sarah Jiang and Scott Richardson for helpful comments and discussions as well as seminar participants at the Kellogg School of Management, the CFA Society of Denmark, Vienna University of Economics and Business, Goethe University Frankfurt, and at AQR Capital Management. We are grateful to Nigel Dally for providing us with historical 10-K filings.

ALTERNATIVE INVESTING

Yes, Lever, but With Care

February 13, 2015

Conventional wisdom holds that sensible investors avoid leverage. This is unfortunate. Sadly, the valuable role of leverage, applied prudently and used to diversify, not simply amplify, is widely misunderstood. In an *Institutional Investor* article this week, I seek to address this misunderstanding with knowledge of how portfolio leverage can be prudently employed and why it can be beneficial in modest doses with proper concern for its dangers.

Consider how investors often seek higher returns through more concentrated portfolios, say through greater equity exposure (concentrating in the more aggressive asset class). However, modest use of leverage can allow investors not to take on more risk, but to take the same level of risk but with a more diversified, more balanced, higher-return-for-the-risk-taken portfolio. This is not esoteric but one of the first things taught in finance class!

In this way, modestly levering a better, more diversified portfolio may improve upon an unlevered, much less diversified one — a rather sensible approach; one that is consistent with finance theory and will likely compensate investors for the necessity of employing some leverage. [1] The article discusses this in more depth, and several things you must do to avoid the dangers that can come along with leverage.

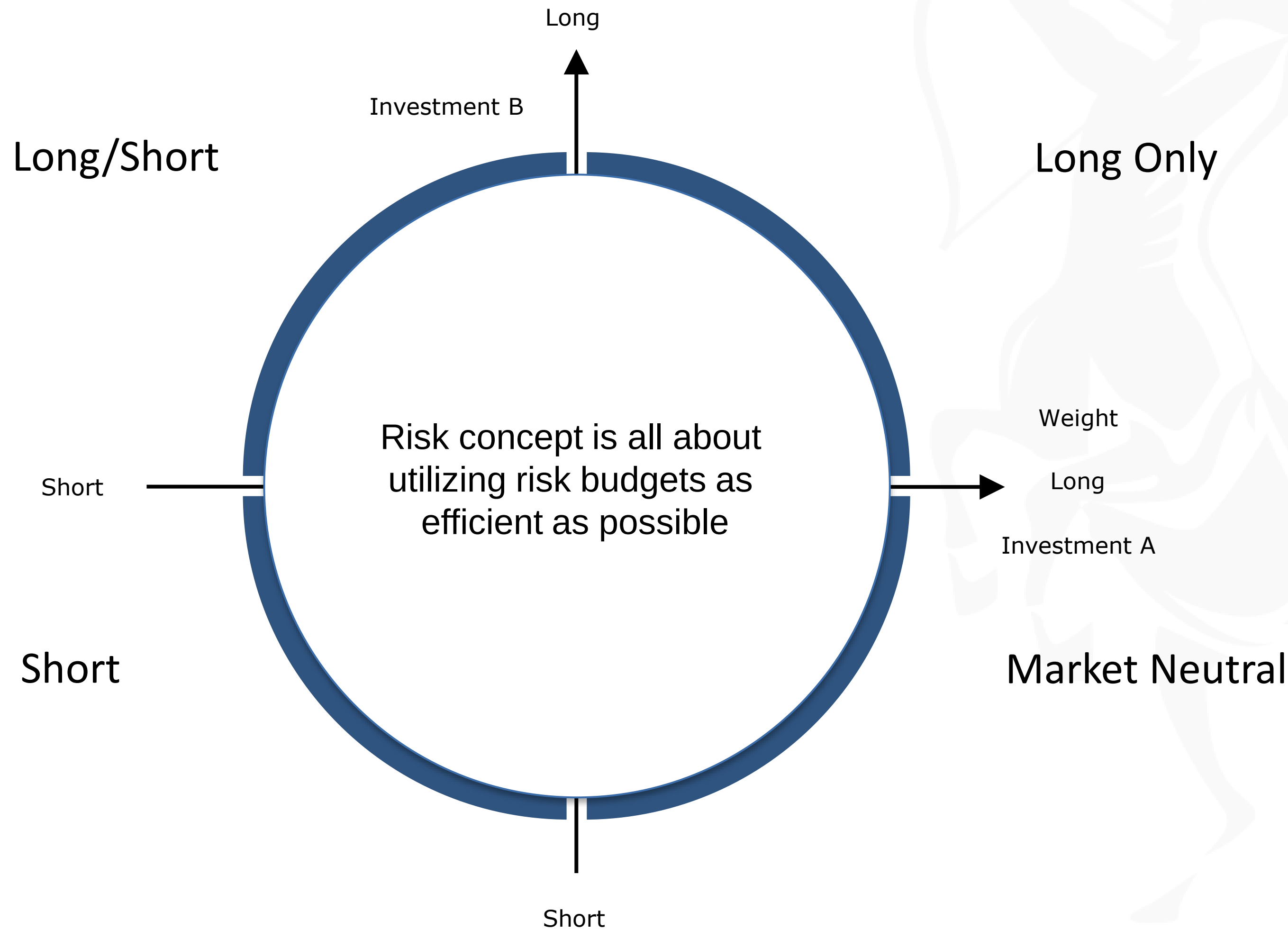
Yes, lever, but in pursuit of diversification not just amplification, and prudently.

[1] This earlier Perspectives piece applies these ideas to risk parity portfolios.

Risk Management Process

Risk-based allocation more effective than allocation by weights

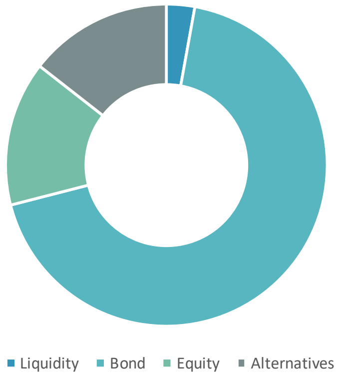
Spaces for „wasted opportunities“ and „unintended bets“ small



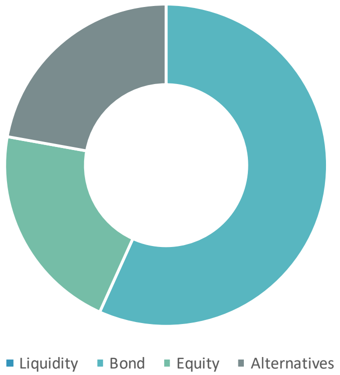
Risk Management Process

State of the art risk management process

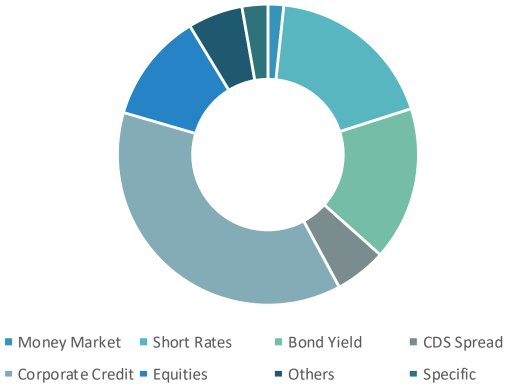
Asset Allocation



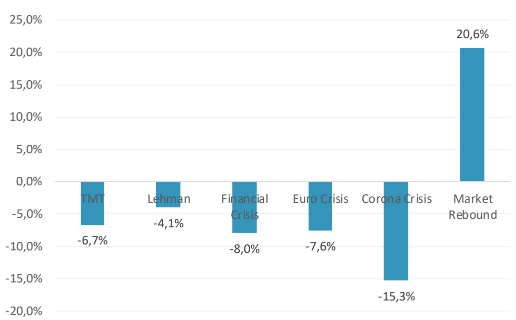
Risk Allocation



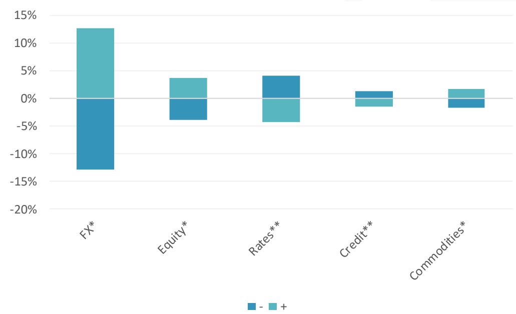
Risk Attribution



Scenario-based stress test



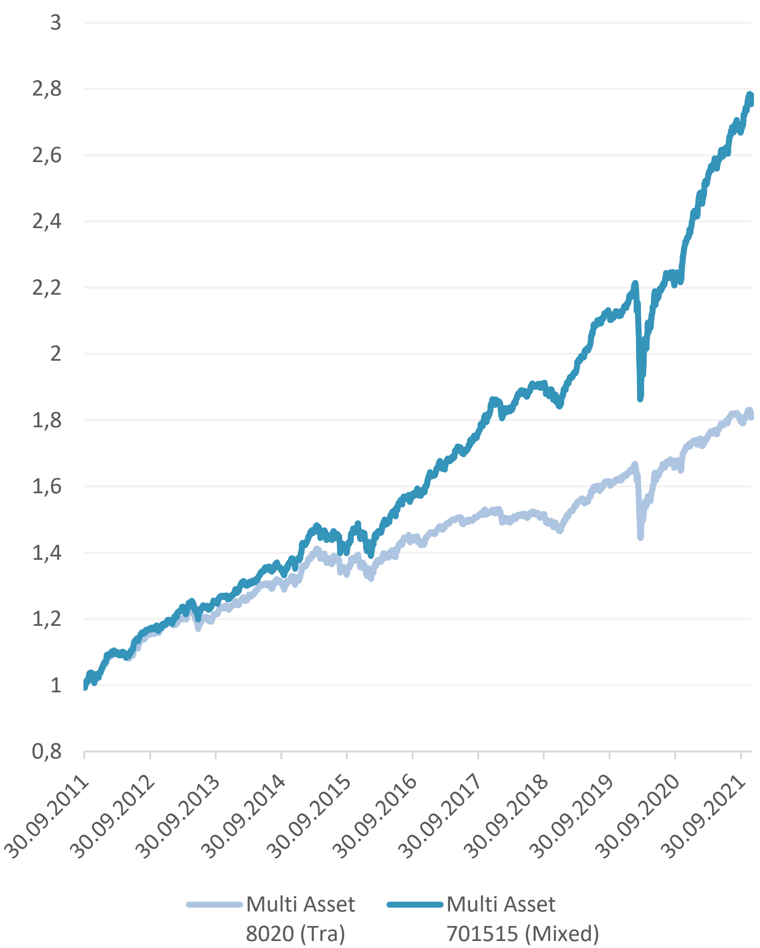
Shock-based stress test



Multi Alternative

An enhancement to return seeking portfolios and strategies..

More return…



…and better return-risk profiles*

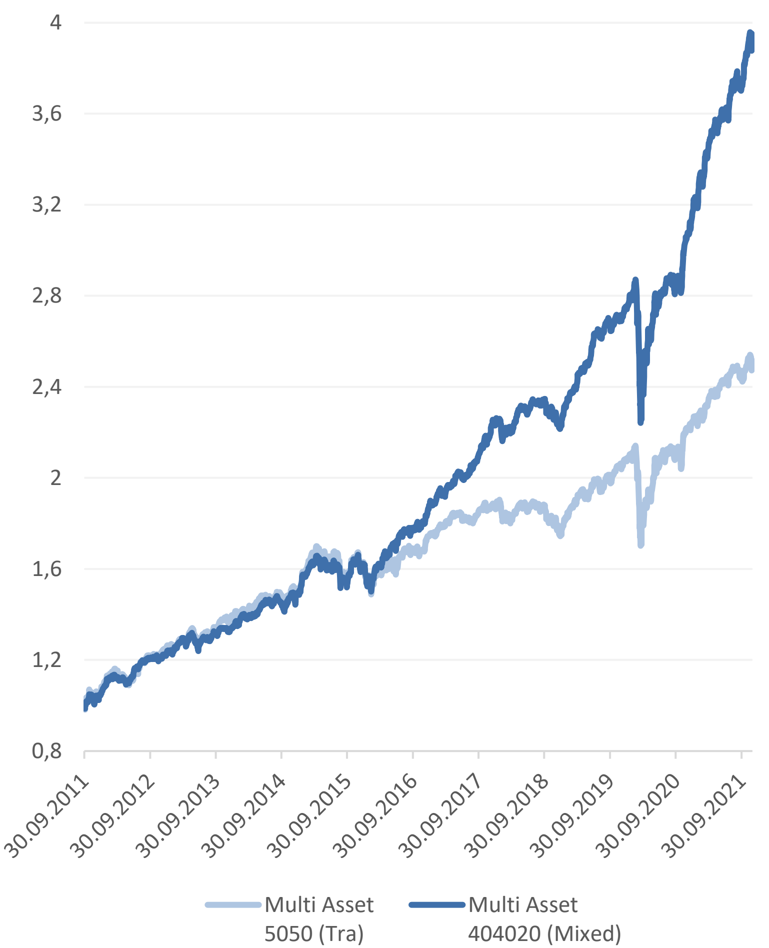
		Traditional Multi Asset 80/20
Return p.a.		5,90%
Volatility		3,95%
Sharpe Ratio		1,50
Max. Drawdown		-13,46%
Calmar Ratio		0,44
		Trad. Multi Asset 70/15 + Multi Alternative 15
Return p.a.		9,36%
Volatility		4,70%
Sharpe Ratio		1,99
Max. Drawdown		-15,85%
Calmar Ratio		0,57

* simulation based on historical data 2011-2021

Multi Alternative

... as well as to more growth oriented strategies

More return...



...and better return-risk profiles*

		Traditional Multi Asset 50/50
Return p.a.		8,69%
Volatility		8,35%
Sharpe Ratio		1,04
Max. Drawdown		-20,56%
Calmar Ratio		0,42
		Trad. Multi Asset 40/40 + Multi Alternative 20
Return p.a.		12,40%
Volatility		7,24%
Sharpe Ratio		1,71
Max. Drawdown		-21,93%
Calmar Ratio		0,55

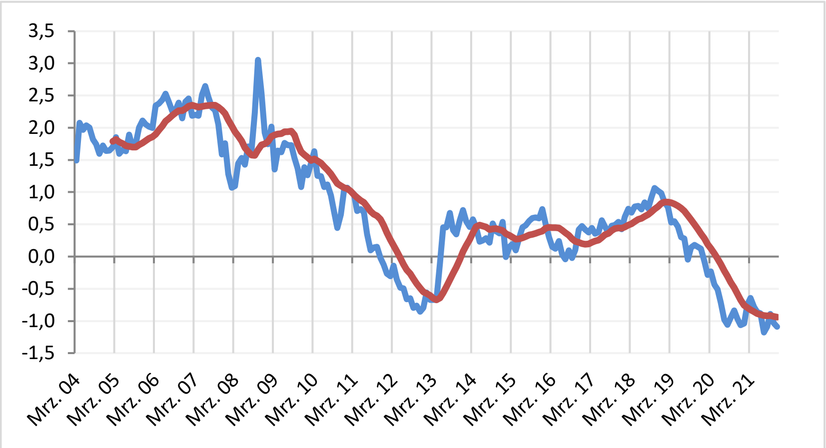
* simulation based on historical data 2011-2021

Summary

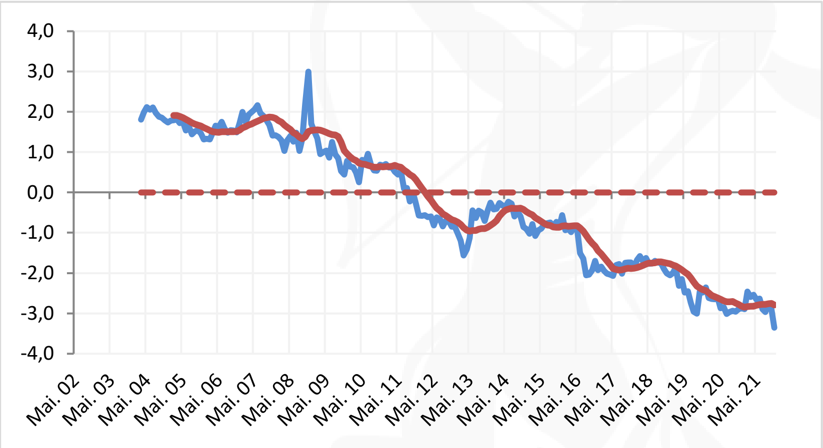
Summary

„Better Beta“ performance to persists as long as real yields stay low/negative

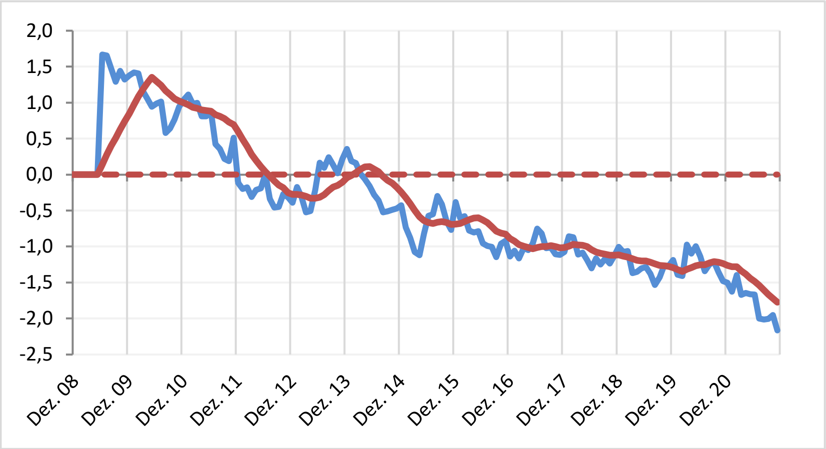
US 10 year real yield



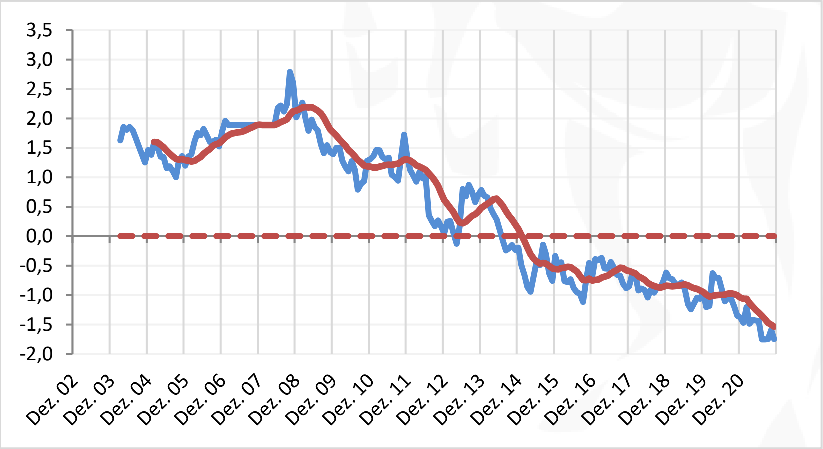
UK 10 year real yield



Germany 10 year real yield



France 10 year real yield



Summary
Investment Case

Rethinking Multi Asset	
Low return environment to persist	• **More sources of return** ➢ Broad-based alternatives concept ➢ Intelligent combination of various alternative sources of return ➢ No „Searching for Alpha“
Loss of diversification opportunities	• **Additional sources of diversification** ➢ Low correlated alternative assets and strategies in one portfolio ➢ Leverage for more diversification instead of „amplification“
Investment process	• **Total Portfolio Approach** ➢ Active approach ➢ No traditional „asset allocation“, all sources of return in direct competition for portfolio inclusion
Goals	• **Better Return-/Risk-Trade Off** ➢ higher dividends/cash flows ➢ improved total return for similar risk levels

Thank you for your attention

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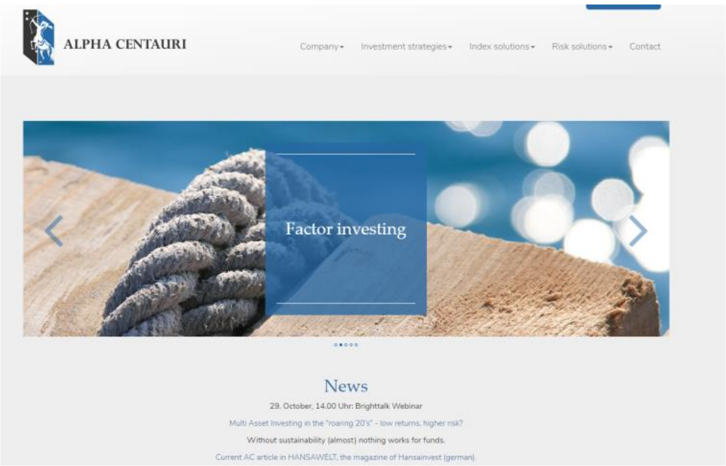
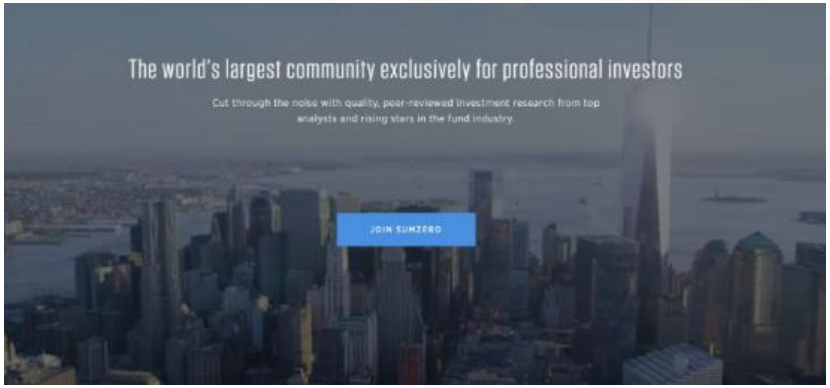
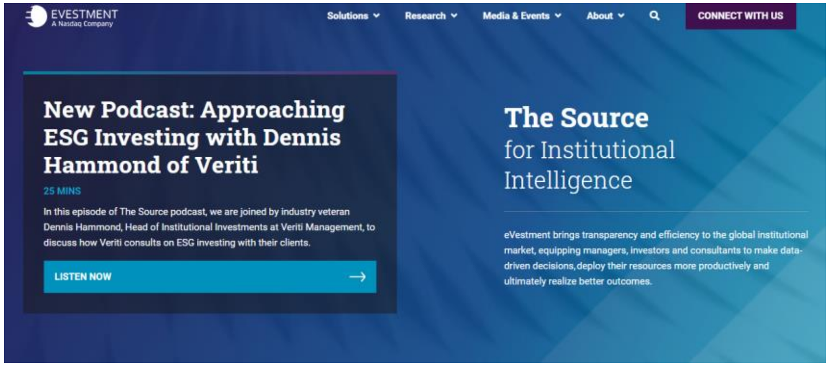


SumZero



eVestment



Contact

ALPHA CENTAURI

Alpha Centauri Investment Management GmbH
Willy-Brandt-Straße 23 • 20457 Hamburg
+49 (40) 89 72 73-0 • info@alpha-centauri.com

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