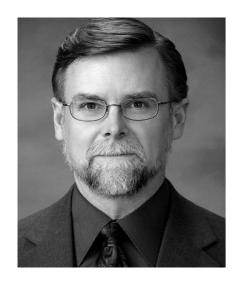
JULEXCAPITAL

Investment solutions for short-term needs

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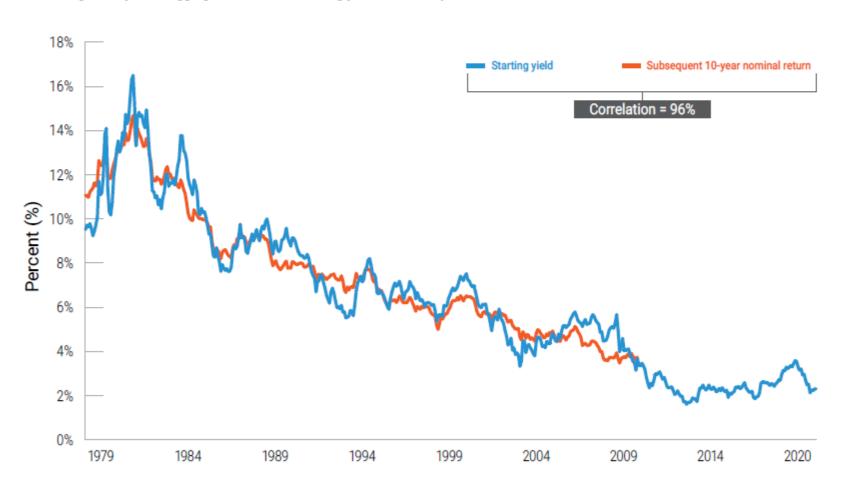
Let's understand an all critical relationship





Core bonds: Starting yields and subsequent returns

Bloomberg Barclays U.S. Aggregate Bond Index starting yield and subsequent returns



What is this chart showing?

This chart shows the starting yield of U.S. core bonds for the past 40+ years, along with the subsequent 10-year total return from that point.

Why is it important?

Investors commonly look to current yields to inform their total return expectations, as historically starting yield is an accurate predictor of future bond returns (96% correlation).

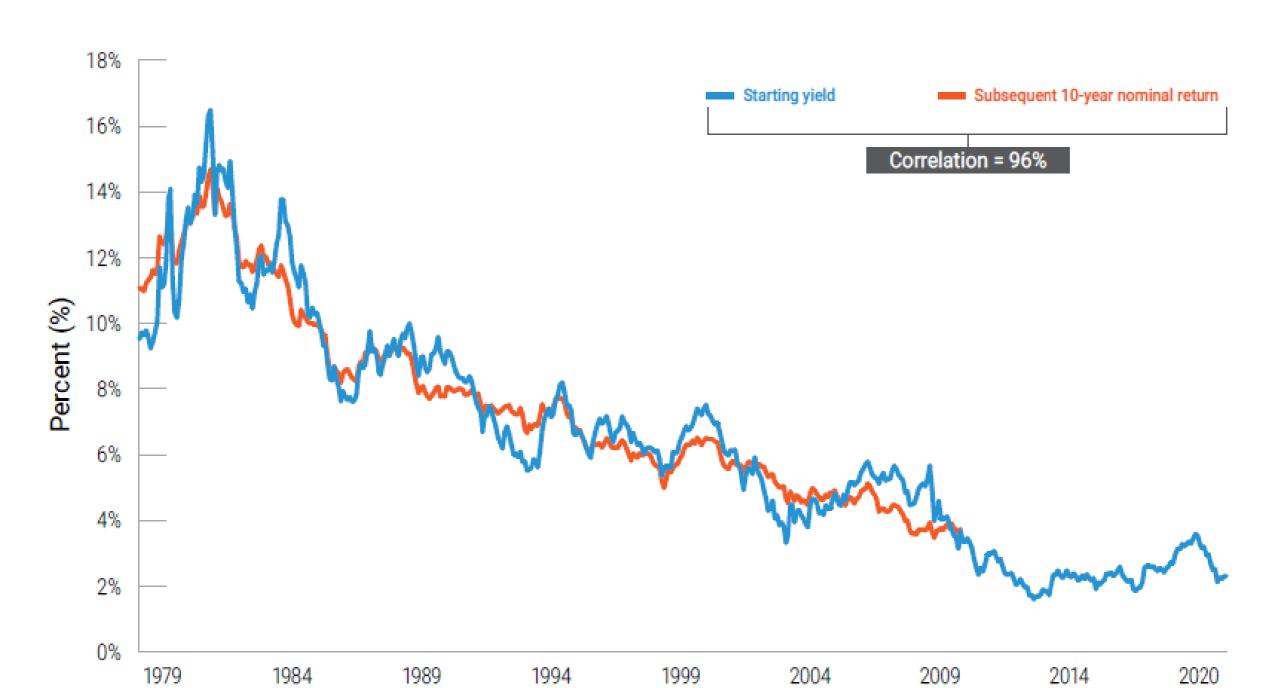
You cannot invest directly in an index. All indices are unmanaged and do not include fees or expenses. Please see the back of this brochure for index definitions and disclosures.

Source: Research affiliates based on data from Bloomberg and FactSet as of Dec. 31, 2020. Proxy: Bloomberg Barclays U.S. Aggregate Bond Index. Past performance is not a guarantee or a reliable indicator of future results.

Today's current yield <u>vs</u> what your client will earn over the years ahead



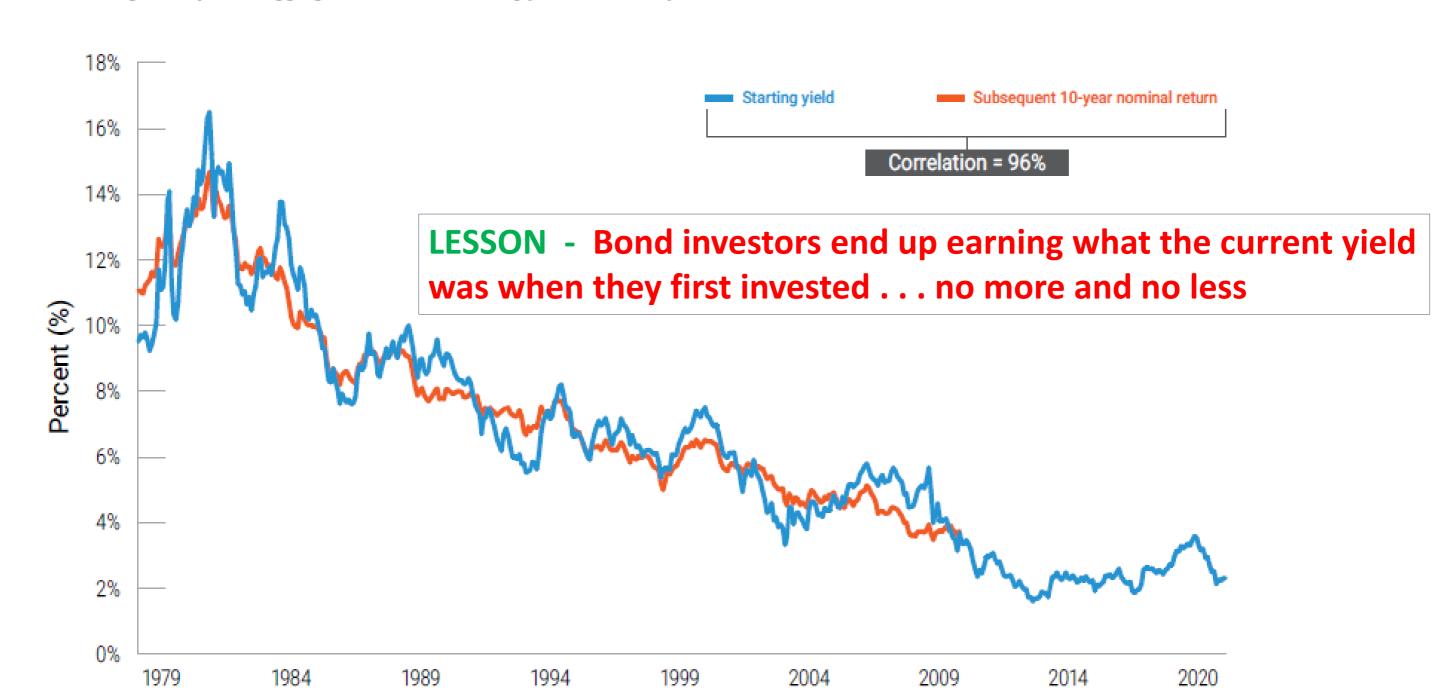
Bloomberg Barclays U.S. Aggregate Bond Index starting yield and subsequent returns



Don't miss this point



Bloomberg Barclays U.S. Aggregate Bond Index starting yield and subsequent returns





- What will your client earn on their bond portfolio?
- Pretty much . . . whatever the current yield was when they first invested



- SIDE NOTE . . . This rule does not apply to
 - Tactical asset allocation bond portfolios
 - Ultra active bond portfolios
 - These are extremely <u>extremely rare</u> . . . you would need to see annual turnover <u>north of</u> 130%
 - One classic example would be JPMorgan Strategic Income Opports I (JSOSX)



Treasury Yields

NAME	COUPON	PRICE	YIELD
GB3:GOV 3 Month	0.00	1.23	1.25%
GB6:GOV 6 Month	0.00	1.73	1.77%
GB12:GOV 12 Month	0.00	2.18	2.25%
GT2:GOV 2 Year	2.50	99.39	2.82%
GT5:GOV 5 Year	2.63	97.91	3.08%
GT10:GOV 10 Year	2.88	98.36	3.07%
GT30:GOV 30 Year	2.88	93.67	3.21%



Treasury Inflation Protected Securities (TIPS)

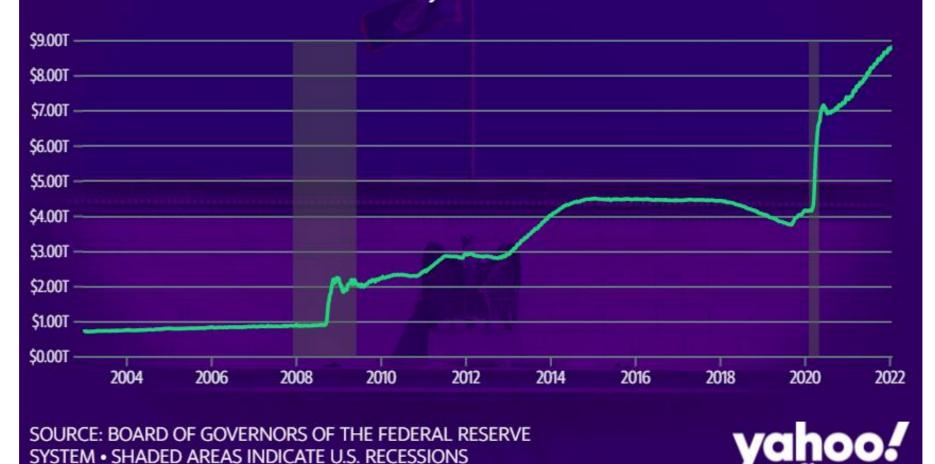
NAME	COUPON	PRICE	YIELD	
GTII5:GOV 5 Year	0.13	100.65	-0.01%	Yield is negative
GTII10:GOV 10 Year	0.13	98.43	0.29%	
GTII20:GOV 20 Year	0.75	99.14	0.80%	
GTII30:GOV 30 Year	0.13	85.71	0.65%	

PHOTO: GETTY IMAGES



FED AIMS TO REDUCE \$8.87T BALANCE SHEET

The Federal Reserve balance sheet is comprised of the central bank's assets and liabilities, such as government loans extended to regional banks and U.S. currency in circulation.



Key issues defining current yields for all short-term bonds



Consumer Price Inflation

• CPI running somewhere around 8.1% on a year-over-year basis

Today's landscape



Symbol	Name	Size of fund in \$millions	Effective duration in years	Current yield in %
M:PIINX	PIMCO Income Adm	\$124,158	1.15	4.08
M:FCISX	Franklin Income C	\$74,196	2.80	5.22
M:VFSIX	Vanguard Short-Term Investment-Grade I	\$69,867	2.77	2.74
M:LALDX	Lord Abbett Short Duration Income A	\$56,585	2.01	3.69
M:FALCX	Strategic Advisers® Large Cap	\$55,748	0.93	2.86
M:PACLX	T. Rowe Price Capital Appreciation Adv	\$48,899	1.91	3.74
M:BASIX	BlackRock Strategic Income Opps Inv A	\$43,626	1.13	2.86
M:VSCSX	Vanguard Short-Term Corp Bd Idx Admiral	\$40,827	2.77	3.20
BSV	Vanguard Short-Term Bond ETF	\$39,931	2.68	1.92
M:VMLTX	Vanguard Ltd-Term Tx-Ex	\$34,531	2.27	4.37
SHY	iShares 1-3 Year Treasury Bond ETF	\$25,465	1.89	1.14
M:MALOX	BlackRock Global Allocation Instl	\$21,940	1.35	3.75
IGSB	iShares 1-5 Year invmt Grd Corp Bd ETF	\$21,549	2.75	3.12
M:VWSTX	Vanguard Short-Term Tx-Ex	\$21,439	1.04	4.37
JPST	JPMorgan Ultra-Short Income ETF	\$18,613	0.39	2.05
SHV	iShares Short Treasury Bond ETF	\$18,560	0.36	1.37
M:VUBFX	Vanguard Ultra-Short-Term Bond Investor	\$17,561	0.97	2.07
M:BAICX	BlackRock Multi-Asset Income Investor A	\$15,891	1.26	5.16
VGSH	Vanguard Short-Term Treasury ETF	\$15,013	1.91	1.25
M:PFTCX	PIMCO Short-Term C	\$14,685	0.05	1.82
M:LUBAX	Lord Abbett Ultra Short Bond A	\$13,907	0.54	2.76
M:PSDLX	Putnam Ultra Short Duration Income C	\$13,032	0.26	2.12
M:JNBAX	JPMorgan Income Builder A	\$11,948	2.62	5.66
M:ASBAX	American Funds ST Bd Fd of Amer A	\$11,765	2.06	1.03
M:JDTRX	PGIM Short-Term Corporate Bond R	\$11,633	2.74	3.27
MINT	PIMCO Enhanced Short Maturity Active ETF	\$11,424	0.99	2.38
	TYPICAL	\$21,494	1.62	2.86



Immediate annuity

Money market fund

Laddered bank CDs Traditional
"Modern Portfolio
Theory" diversified
bond portfolio

Laddered high yield bonds

Tactical asset allocation



Immediate annuity

Money market fund

Laddered bank CDs Traditional
"Modern Portfolio
Theory" diversified
bond portfolio

Laddered high yield bonds

Tactical asset allocation

Immediate fixed annuity



Pros

- Can use the word "guaranteed"
- Great way to charge a high advisory fee and have it hidden from the client
- Rock solid, never varying, monthly payments . . . bomb proof
- No work once it's set up and running

Cons

- Most expensive option . . . by a wide wide margin
- The four above benefits come at an offensively high price point
- Locked in and illiquid for the life of the annuity



Immediate annuity

Money market fund

Laddered bank CDs Traditional
"Modern Portfolio
Theory" diversified
bond portfolio

Laddered high yield bonds

Tactical asset allocation

Money market mutual fund



Pros

- Very very little probability of generating a negative return . . . extremely unlikely
- Near perfect liquidity
- Small account minimum

Cons

- Can't use the word "guaranteed"
- Near zero rate of return
- Can't justify charging an advisory fee



Immediate annuity

Money market fund

Laddered bank CDs Traditional
"Modern Portfolio
Theory" diversified
bond portfolio

Laddered high yield bonds

Tactical asset allocation

Laddered bank (or credit union) CDs



Pros

- Can use the word "guaranteed"
- No penalty for early withdrawal (other than giving up interest-earned)
- Rock solid, never varying, monthly payments . . . bomb proof
- Credit unions offer higher rates than banks

Cons

- A lot of work to build and maintain the ladder . . . and for very little juice
- Pretty low rate of return
- Can't justify charging an advisory fee above 25bps

The ladders I'm building for my clients today are generating 273bps (before advisory fees)



Immediate annuity

Money market fund

Laddered bank CDs Traditional
"Modern Portfolio
Theory" diversified
bond portfolio

Laddered high yield bonds

Tactical asset allocation

Traditional "Modern Portfolio Theory" diversified bond portfolio



Pros

- Conventional, vanilla, accepted
- If you use this approach, you are hidden safely well inside the crowd
- Current yield of 2.19% for a reasonable, logical, prudent well-diversified portfolio
- Modest minimum account size
- Flawless liquidity

Cons

- Can charge an advisory fee . . . but not above 25bps
- Need to rebalance the portfolio perhaps once a year or once every other year
- Negative quarterly returns when interest rates rise quickly enough



Immediate annuity

Money market fund

Laddered bank CDs Traditional
"Modern Portfolio
Theory" diversified
bond portfolio

Laddered high yield bonds

Tactical asset allocation

Laddered high yield bonds



Pros

- Highest expected return per unit of risk . . . of anything available today, anywhere !!!
- Tremendously favorable tradeoff between risk and return
- Current yield of 3.3% . . . is a reasonable expectation
- Low account minimum
- Works fantastically well with "buckets" . . . Time Segmentation Investing

Cons

- Clients have to embrace and have high tolerance for inordinate week-to-week volatility
- Significant work to build-it-yourself . . . the right way to do this, is to use a fully-modeled solution
- Does terribly every time we have a Global Pandemic or a Great Recession . . . thankfully, these only happen once every "hundred years"
- Clients must bring adequate patience to the table



Immediate annuity

Money market fund

Laddered bank CDs Traditional
"Modern Portfolio
Theory" diversified
bond portfolio

Laddered high yield bonds

Tactical asset allocation

Tactical asset allocation



Pros

- Best possible solution when faced with
 - "Directional" change
 - Extreme uncertainty about what comes next . . . and how things will settle out
- Continuously adapts and evolves . . . never trapped within a pre-defined narrow box
- Spans and draws upon the entire range of all fixed-income opportunities (with suitably short effective durations)

• Cons

- Impractical, unless you access a fully-modeled, fully-automated investment solution
- Doesn't track conventional performance benchmarks . . . makes evaluation more challenging
- Performs poorly when nothing's changing, uncertainty is low, everyone's optimistic

I like the TAA solution



But does it make sense?

- Yes . . . If you can either
 - Give it a <u>FULL</u> 2 ½ years before touching it
 - Or . . . You slowly and smoothly draw the account down over <u>at least</u> 5 years
- Can we show this?
 - Yes, by building a simplistic TAA model and examining it over the period 1919-2022

Construction



- Portfolio consists of 5 positions
- Reconfigured once each month on the same date
- Positions are <u>not</u> equal-weighted . . . Instead scaled based on their contributions to risk and return over the entire period

 The 5 positions are those that trended most strongly and are drawn from a universe of 12 asset categories

The 12 asset categories



Dow Jones U.S. Corporate Bond investment grade

AAA-rated municipal bonds

Thompson Jefferies CRB Core Commodity Total Return Index (with GFD extension)

Thomson Reuters Core Commodity CRB Index (with GFD extension)

Reuters CRB Total Return Index (with GFD extension)

International treasury bonds GDP-weighted

Global treasury bonds cap-weighted

90-day U.S. Treasury bills

1-year U.S. Treasury bonds

2-year U.S. Treasury bonds

5-year U.S. Treasury bonds

10-year U.S. Treasury bonds

Are these the asset categories one would use today?



Of course not

- These are the assets that provide
 - Data since Jan 1919
 - Ultra high quality data
 - Extremely well-defined clarity around exactly what they are and what they consist of

Average weightings over last 103 years



- **24.5** Dow Jones U.S. Corporate Bond investment grade
- **1.6** AAA-rated municipal bonds
- **8.3** Thompson Jefferies CRB Core Commodity Total Return Index (with GFD extension)
- **0.6** Thomson Reuters Core Commodity CRB Index (with GFD extension)
- **7.2** Reuters CRB Total Return Index (with GFD extension)
- **5.5** International treasury bonds GDP-weighted
- **8.0** Global treasury bonds cap-weighted
- **12.9** 90-day U.S. Treasury bills
- **8.1** 1-year U.S. Treasury bonds
- **13.3** 2-year U.S. Treasury bonds
- **1.9** 5-year U.S. Treasury bonds
- **8.1** 10-year U.S. Treasury bonds



- 7.9 Thompson Jefferies CRB Core Commodity Total Return Index (with GFD extension)
- **0.7** Thomson Reuters Core Commodity CRB Index (with GFD extension)
- **6.8** Reuters CRB Total Return Index (with GFD extension)
- **51.0** 90-day U.S. Treasury bills
- **33.7** 1-year U.S. Treasury bonds



- **14.7** Thompson Jefferies CRB Core Commodity Total Return Index (with GFD extension)
- **1.2** Thomson Reuters Core Commodity CRB Index (with GFD extension)
- **12.7** Reuters CRB Total Return Index (with GFD extension)
- **8.5** International treasury bonds GDP-weighted
- **62.8** 1-year U.S. Treasury bonds

How often did commodities appear in the portfolio



46.6% of the months

Side note

- Precious metals behave <u>terribly</u> in short-term TAA models, i.e., when you only have 2 ½ years to perform
- Narrow commodities such as oil, industrial metals, and agricultures also perform poorly

Inflation-adjusted results After inflation subtracted out



• 4.9% average return . . . over 103 years

- Over rolling time windows of 2 ½ years
 - 89% chance of earning more than 0%
 - 84.6% chance of earning more than ½%
 - 80.2% chance of earning more than 1%
 - 75.8% chance of earning more than 1 ½%
 - 71% chance of earning more than 2%



• 7.8% average return . . . over 103 years

- Over rolling time windows of 2 ½ years
 - 97.5% chance of earning more than 0%
 - 95.8% chance of earning more than ½%
 - 94.1% chance of earning more than 1%
 - 92% chance of earning more than 1 ½%
 - 90.1% chance of earning more than 2%

Julex tactical asset allocation bond solution





Opportunistic Yrs 0-5 TAA

Product Shee

Overview

- A tactical limited duration bond strategy aiming to generate higher-thanaverage income while preserving capital.
- Portfolio duration: less than 4.25 years
 Portfolio weighted average credit rating: BBB- or better
 Monthly portfolio update
- Use unique RiskSwitch™ indicator to determine the level of participation in high yield and bank loan markets.

Facts

Customized Benchmark:

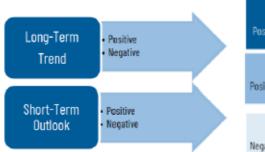
60.84% Bank Loans, 30.40% Short-Term Treasuries, 7.81% Intermediate-Term Treasuries, 0.95% T-Bill

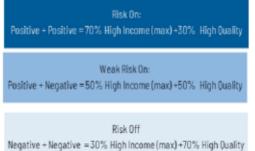
Portfolio Manager:

Henry Ma, Ph. D., CFA 25-Year Investment Experience

Investment Process

Julex Capital uses a tactical model combining both long-term trend analysis and short-term market outlook to position the portfolios among high yield bonds, bank loans, mortgages, Treasuries and cash/short-term Treasuries.





Investment Universe

High Neads High Quality Bonds High Yield Bonds Treasuries Bank Loans Mortgages Cash/Cash Equivalents

*investment performance shown on this page is HYPOTHETICAL. It is based on the back tests of historical data. Hypothetical performance results have many inherent limitations, No representation is being made that any account will or is likely to achieve profit or lesses similar to those shown, in fact, there are frequently sharp differences between hypothetical performance results and the actual results subsequently achieved by any particular trading program.

Hypothetical Back Test Results*

January 2000 - December 2020	Opportunistic Years 0-5	Benchmark
Annual Return	5.67%	3.87%
Standard Deviation	3.12%	3.68%
Max. Drawdown	-4.02%	-16.19%
The Great Recession 10/31/2007-2/28/2009)	1.47%	-11-86%
COVID Crisis (12/31/2019 - 3/31/2020)	-2.77%	-4_44%
Sharpe Ratio risk free rate = 1.60%)	1.30	0.62



Investment Universe

High Quality Bonds High Income Bonds **High Yield Bonds** Treasuries **Bank Loans** Mortgages Cash/Cash Equivalents



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What does Rob use with his own clients?

I use four solutions

WHY? Because no solution is ever "Best" and clients have different needs

I use four solutions across my own clients



- Money market fund
- Laddered credit union CDs
- Laddered high yield bonds . . . fully-modeled, fully-automated
- Tactical asset allocation . . . Julex

- Why?
- Clients differ
- With respect to
 - Volatility
 - Patience
 - Understanding and appreciation for "directional" change and off-the-map uncertainty

For more information contact





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Office 781-489-5398



Evidence that tactical asset allocation works

Friday

June 17th

11:00 a.m. EASTERN

Important Disclosures



All data and statistics were provided by Global Financial Data, Inc. and NDR, Inc. (unless otherwise indicated in the exhibit)

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One of the limitations of hypothetical performance results is that they are generally prepared with the benefit of hindsight. In addition, hypothetical trading does not involve financial risk, and no hypothetical trading record can completely account for the impact of financial risk in actual trading. For example, the ability to withstand losses or adhere to a particular trading program in spite of trading losses are material points which can also adversely affect actual trading results. There are numerous other factors related to the markets in general or to the implementation of any specific trading program which cannot be fully accounted for in the presentation of hypothetical performance results and all of which can adversely affect actual trading results.

The composition of a benchmark index may not reflect the manner in which a Julex portfolio is constructed in relation to expected or achieved returns, investment holdings, portfolio guidelines, restrictions, sectors, correlations, concentrations, volatility, or tracking error targets, all of which are subject to change over time.

No representation or warranty is made to the reasonableness of the assumptions made or that all assumptions used to construct the performance provided have been stated or fully considered.