BCC Research | Investment Conference 2023

8.00-8.45

They Never See It Coming



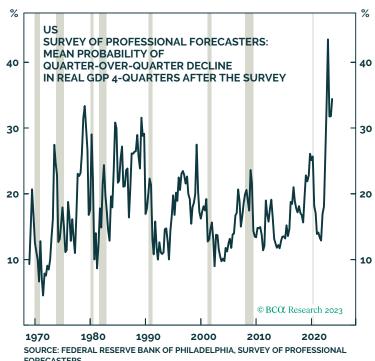
PETER BEREZIN

Chief Global Strategist

Director Of Research

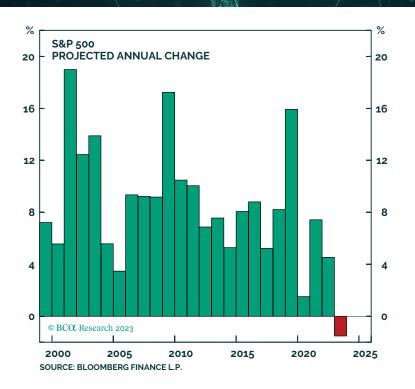
BCA Research

The Most Anticipated Recession In History

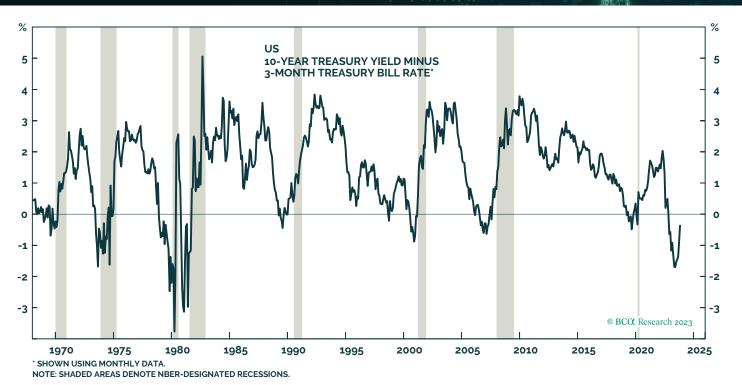


FORECASTERS.

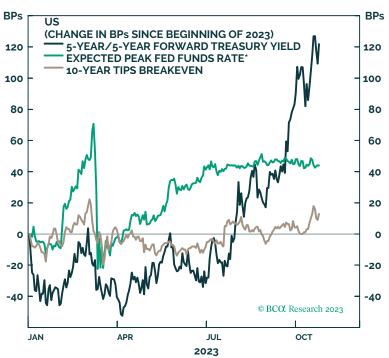
NOTE: SHADED AREAS DENOTE NBER-DESIGNATED RECESSIONS.



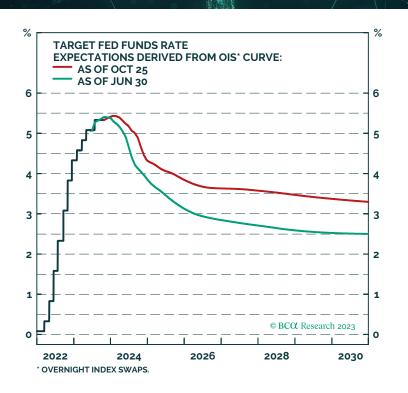
An Inverted Yield Curve: Harbinger Of Doom Or A Saving Grace?



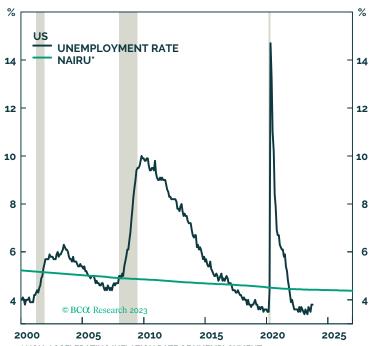
What's Driven Bond Yields Recently?



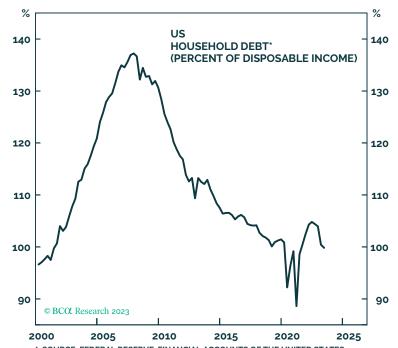
^{*} AS PRICED BY OVERNIGHT INDEX SWAPS.



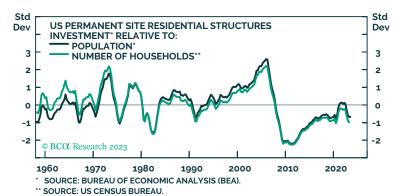
Unemployment Is Low And Deleveraging Pressures Have Abated

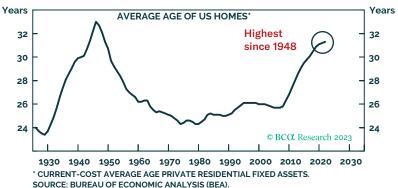


* NON-ACCELERATING INFLATION RATE OF UNEMPLOYMENT. SOURCE: CONGRESSIONAL BUDGET OFFICE (CBO). NOTE: SHADED AREAS DENOTE NBER-DESIGNATED RECESSIONS.

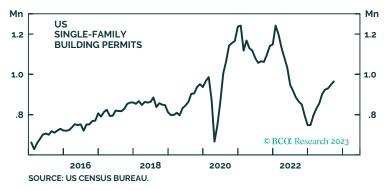


No Housing Overhang

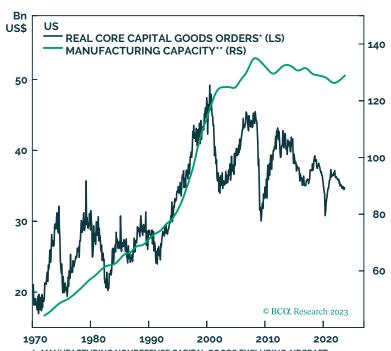






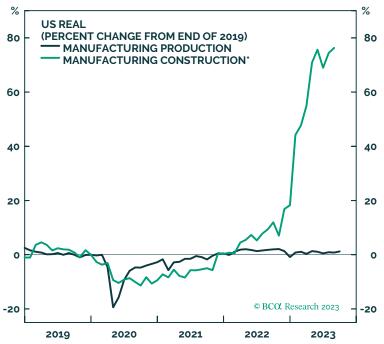


No Capex Overhang Either



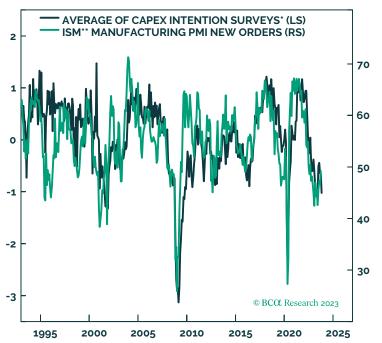
* MANUFACTURING NONDEFENSE CAPITAL GOODS EXCLUDING AIRCRAFT.
DEFLATED BY PPI FOR PRIVATE CAPITAL EQUIPMENT. SHOWN IN 1982 US DOLLARS.

** SOURCE: FEDERAL RESERVE.

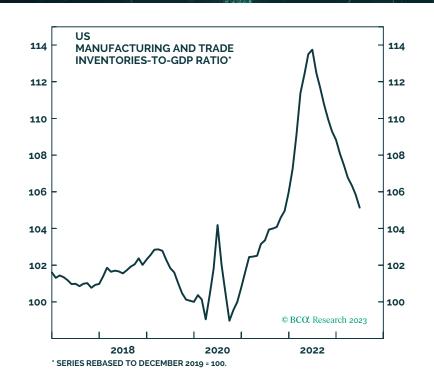


* DEFLATED BY PPI FOR NEW INDUSTRIAL BUILDING CONSTRUCTION SECTOR. NOTE: SERIES REBASED TO DECEMBER 2019 = 0%.

Capex Intentions Appear To Have Bottomed

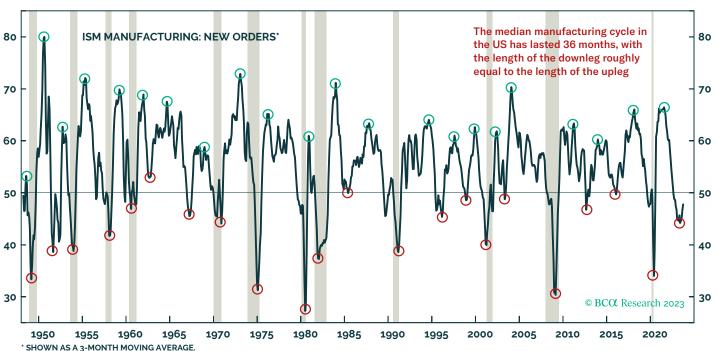


* AVERAGE OF STANDARDIZED CAPITAL EXPENDITURE EXPECTATIONS FOR THE NFIB SURVEY (3-TO-6 MONTHS), DALLAS, KANSAS CITY, NEW YORK EMPIRE, PHILADELPHIA, AND RICHMOND FED REGIONAL SURVEYS (6 MONTHS). LATEST DATA POINT IS AN ESTIMATE.



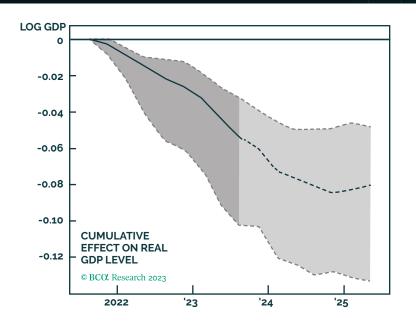
^{**} INSTITUTE FOR SUPPLY MANAGEMENT.

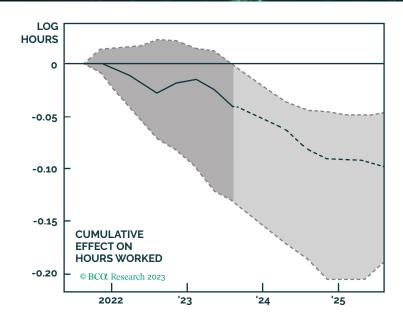
The Three-Year Manufacturing Cycle, Illustrated



' SHOWN AS A 3-MONTH MOVING AVERAGE.
SOURCE: INSTITUTE FOR SUPPLY MANAGEMENT.
NOTE: SHADED AREAS DENOTE NBER-DESIGNATED RECESSIONS.

The Lagged Effects Of Past Tightening Will Weigh On Output

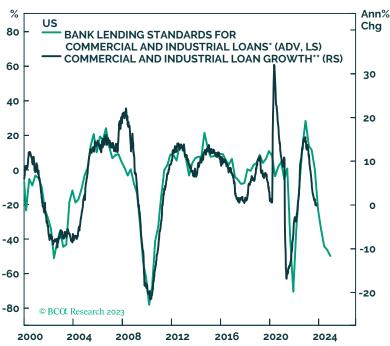




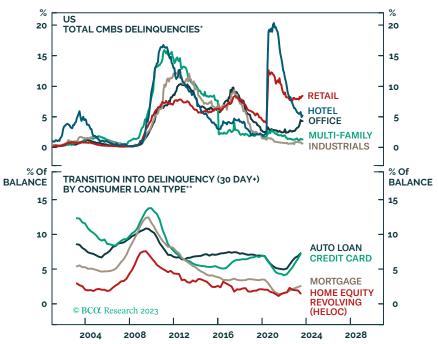
SOURCE: STEFANIA D'AMICO, AND THOMAS KING, <u>PAST AND FUTURE EFFECTS OF THE RECENT MONETARY POLICY TIGHTENING</u>, <u>CHICAGO FED LETTER</u>, NO. 483 (SEPTEMBER 2023).

NOTE: SOLID BLACK LINES DEPICT THE MEDIAN IMPACTS OF THE MONETARY POLICY TIGHTENING THAT HAVE ALREADY OCCURRED AND THE DASHED BLACK LINES DEPICT THE MEDIAN IMPACTS
THAT HAVE YET TO COME. THE DARKLY AND LIGHTLY SHADED REGIONS SURROUNDING THE SOLID AND DASHED BLACK LINES, RESPECTIVELY, ARE THE INTERQUARTILE RANGES BASED ON THE
UNCERTAINTY ASSOCIATED WITH FED'S ESTIMATES FROM THE D'AMICO AND KING (2023) MODEL. T-BILL STANDS FOR U.S. TREASURY BILL; GDP STANDS FOR GROSS DOMESTIC PRODUCT; AND CPI
STANDS FOR CONSUMER PRICE INDEX. FOR FURTHER DETAILS, PLEASE CONSULT STEFANIA D'AMICO, AND THOMAS KING, <u>PAST AND FUTURE EFFECTS OF THE RECENT MONETARY POLICY TIGHTENING</u>,
CHICAGO FED LETTER, NO. 483 (SEPTEMBER 2023). AUTHORS' CALCULATIONS BASED ON DATA FROM THE FEDERAL RESERVE BANK OF ST. LOUIS, FRED; AND WOLTERS KLUWER, <u>BLUE CHIP ECONOMIC INDICATORS</u>, FROM HAVER ANALYTICS.

Tighter Lending Standards Will Curb Credit Growth



SHOWN ADVANCED BY 62 WEEKS, WEIGHTED-AVERAGE OF LOANS TO SMALL AND LARGE FIRMS, NET PERCENTAGE OF RESPONDENTS TIGHTENING STANDARDS. POSITIVE VALUES DENOTE EASING STANDARDS, WHILE NEGATIVE VALUES DENOTE TIGHTENING STANDARDS. SOURCE: FEDERAL RESERVE, SENIOR LOAN OFFICER OPINION SURVEY.

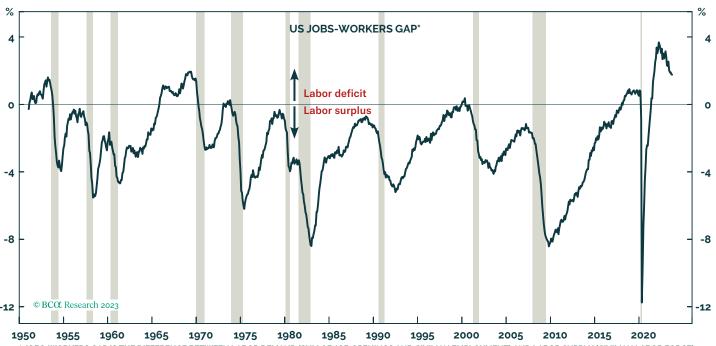


^{*} SOURCE: MOODY'S INVESTORS SERVICE, TREPP, AND LCC.

^{**} DATA ADJUSTED TO EXTRACT THE EFFECT OF STATISTICAL BREAK IN 2010. SOURCE: FEDERAL RESERVE.

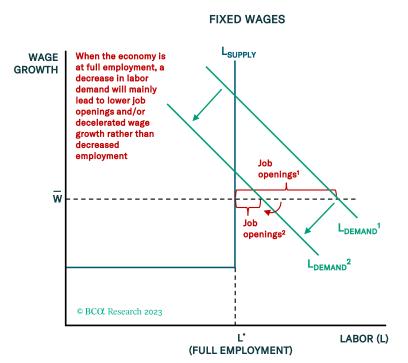
^{**} SHOWN AS A 4-QUARTER MOVING TOTAL. SOURCE: FEDERAL RESERVE BANK OF NEW YORK.

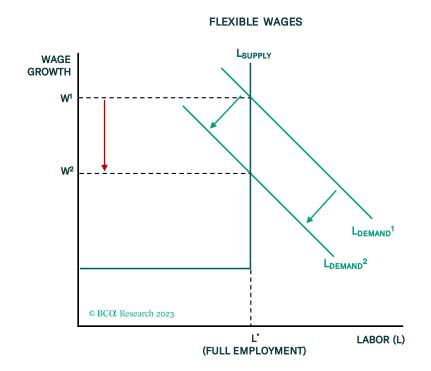
The Labor Market Is Cooling



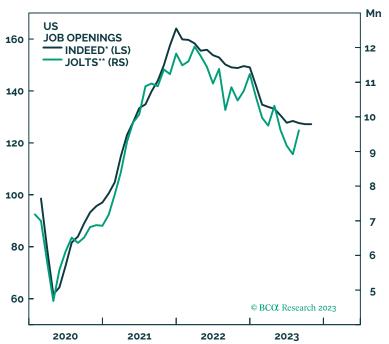
^{*} JOBS-WORKERS GAP IS THE DIFFERENCE BETWEEN LABOR DEMAND (SUM OF JOB OPENINGS AND CIVILIAN EMPLOYMENT) AND LABOR SUPPLY (CIVILIAN LABOR FORCE)
AS A PERCENT OF THE LABOR SUPPLY. HISTORICAL JOB OPENINGS DATA ARE EXTENDED USING THE COMPOSITE HELP-WANTED INDEX ESTIMATED IN REGIS BARNICHON,
"BUILDING A COMPOSITE HELP-WANTED INDEX", ECONOMICS LETTERS VOLUME 109, ISSUE 3, (DECEMBER 2010). JOB OPENINGS SINCE JUNE 2022 ARE BASED ON BLS
JOLTS JOB OPENINGS AND ESTIMATES USING INDEED JOB POSTINGS INDEX.
NOTE: SHADED AREAS DENOTE NBER-DESIGNATED RECESSIONS.

When The Economy Is Near Full Employment, Falling Labor Demand Mainly Leads To Lower Job Openings And Slower Wage Growth

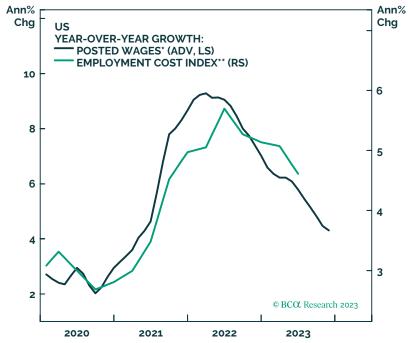




Job Openings Are Trending Lower And Wage Growth Has Slowed



^{*} SERIES REBASED TO FEB. 2020 = 100. SOURCE: INDEED.

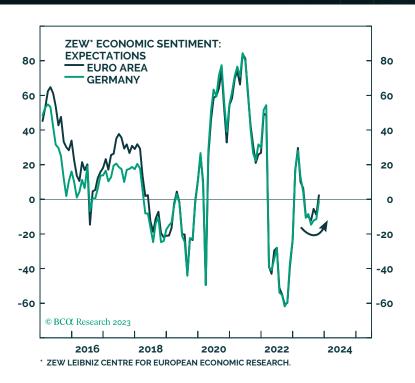


SHOWN ADVANCED BY 2 MONTHS AND AS A 3-MONTH MOVING AVERAGE.
 SOURCE: INDEED.

^{**} SOURCE: BUREAU OF LABOR STATISTICS (BLS).

^{**} WAGES AND SALARIES OF ALL WORKERS IN PRIVATE INDUSTRIES. SOURCE: BUREAU OF LABOR STATISTICS (BLS).

The European Economy Is Struggling But There Are Some Glimmers Of Hope

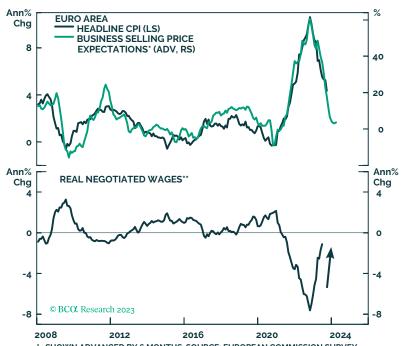




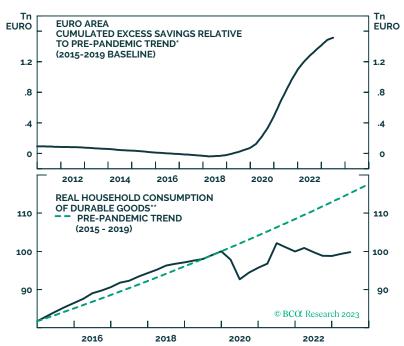
^{*} SOURCE: S&P GLOBAL.

^{**} IN US DOLLAR TERMS. SHOWN SMOOTHED EXCEPT FOR LATEST DATA POINT.

Falling Inflation Will Boost European Real Incomes...



^{*} SHOWN ADVANCED BY 6 MONTHS. SOURCE: EUROPEAN COMMISSION SURVEY.

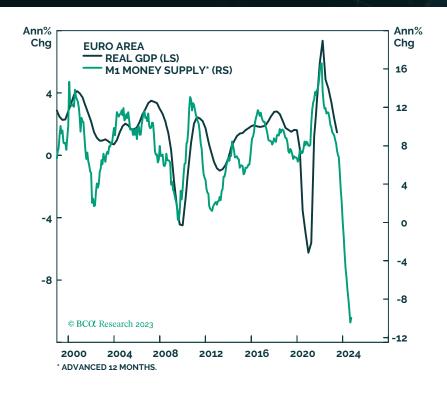


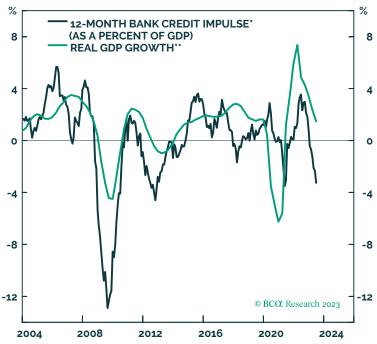
^{*} BASED ON BCA CALCULATIONS.

^{**} DEFLATED BY HEADLINE CPI.

^{**} INCLUDES GERMANY, FRANCE, ITALY, SPAIN, AND THE NETHERLANDS. REBASED TO Q4 2019 = 100.

...But Europe Will Succumb To A Recession Too

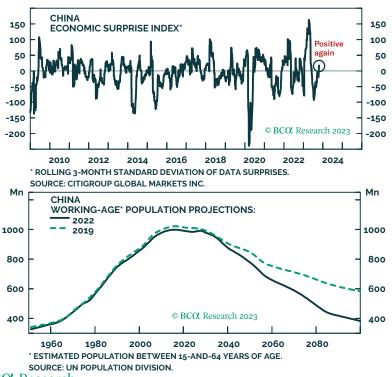


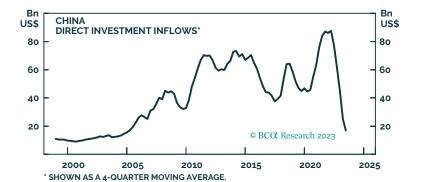


^{* 12-}MONTH CHANGE OF THE 12-MONTH CHANGE IN CREDIT TO THE PRIVATE SECTOR AS A PERCENT OF 4-QUARTER MOVING TOTAL GDP.

[&]quot; ANNUAL PERCENT CHANGE OF 4-QUARTER MOVING TOTAL. SOURCE: ECB.

Recent Activity Data In China Has Surprised On The Upside, But Risks Of Japanification Remain







The Last Fed Rate Hike Is A Decent Rule Of Thumb For Timing The Peak In The 10-Year Treasury Yield

	MONTHS BETWEEN THE LAST HIKE AND					
DATE OF LAST HIKE	THE PEAK IN THE 10-YEAR TREASURY YIELD	THE TROUGH IN THE TREASURY EXCESS RETURN INDEX*	THE TROUGH IN THE 2-YEAR/10-YEAR TREASURY SLOPE			
MARCH 1980	-1	0	-1			
MAY 1981	4	4	3			
MAY 1989	-3	-2	-2			
FEB 1995	-3	-3	-2			
MAY 2000	-4	-4	-2			
JUNE 2006	0	0	5			
DEC 2018	-2	-2	8			
AVERAGE	-1.3	-1.0	1.3			

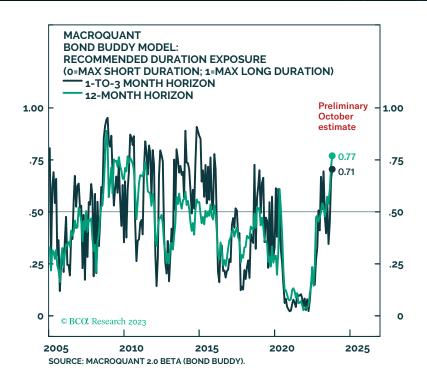
^{*} EXCESS RETURN RELATIVE TO A POSITION IN CASH. SOURCE: BLOOMBERG INDICES.

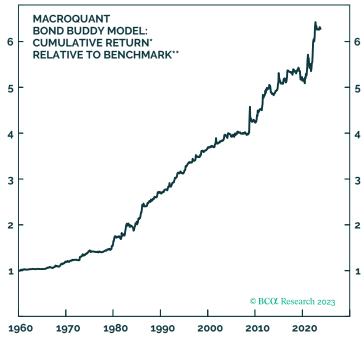
The Risk-Reward To Owning Long-Duration Bonds Has Improved

		IMPLIED 1-YEAR	R RETURNS (%) OF A 10-	YEAR GOVERNMENT BON	ND BASED ON DIFFEREN	T YIELD LEVELS	
Yield Level	US	GERMANY	FRANCE	SWITZERLAND	JAPAN	UK	AUSTRALIA
6.0%	-3.6	-22.2	-16.1	-40.5	-43.6	-6.1	-4.8
5.5%	0.0	-18.3	-12.3	-36.3	-39.3	-2.5	-1.2
5.0%	3.6	-14.3	-8.4	-32.0	-35.0	1.2	2.4
4.5%	7.2	-10.4	-4.6	-27.8	-30.7	4.9	6.1
4.0%	10.8	-6.4	-0.7	-23.5	-26.3	8.6	9.7
3.5%	14.4	-2.4	3.1	-19.3	-22.0	12.2	13.4
3.0%	18.1	1.5	7.0	-15.0	-17.7	15.9	17.0
2.5%	21.7	5.5	10.8	-10.8	-13.4	19.6	20.6
2.0%	25.3	9.4	14.7	-6.5	-9.1	23.3	24.3
1.5%	28.9	13.4	18.6	-2.2	-4.7	27.0	27.9
1.0%	32.6	17.4	22.4	2.1	-0.4	30.7	31.6
0.5%	36.2	21.3	26.3	6.3	3.9	34.4	35.3
0.0%	39.8	25.3	30.2	10.6	8.3	38.1	38.9
-0.5%	43.4	29.3	34.0	14.9	12.6	41.8	42.6
-1.0%	47.1	33.3	37.9	19.2	17.0	45.5	46.2
-1.5%	50.7	37.2	41.8	23.4	21.3	49.2	49.9
-2.0%	54.3	41.2	45.7	27.7	25.6	52.9	53.6

NOTE: CALCULATION INCLUDES CURRENT YIELD, ROLLDOWN, AND PRICE CHANGES.

Bond Buddy Thinks Bonds Are Great Again





^{*} INDEXED TO FEBRUARY 1960 = 1.0.

SOURCE: MACROQUANT 2.0 BETA (BOND BUDDY).

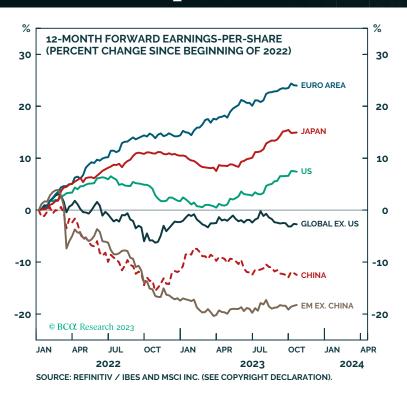
^{**} BENCHMARK ALLOCATION IS BASED ON A PORTFOLIO OF 50% BONDS AND 50% CASH.

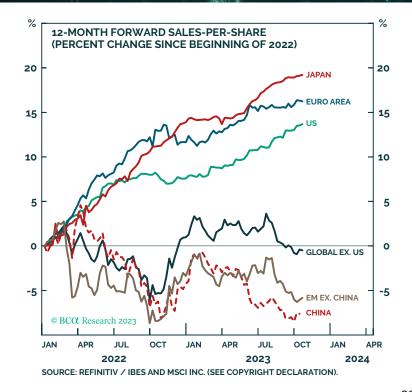
On Average, Stocks Have Peaked Six Months Before The Onset Of A Recession

RECESSIONS	S&P 500 PEAK* (MONTHS)	S&P 500 TROUGH* (MONTHS)	PEAK-TO-TROUGH DECLINE (%)
DEC '69 - NOV '70	-13	+6	-36%
NOV '73 - MAR '75	-11	+10	-48%
JAN '80 - JUL '80	0	+2	-17%
JUL '81 - NOV '82	-8	+12	-27%
JUL'90 - MAR '91	-2	+3	-20%
MAR '01 - NOV '01	-7	+18	-49%
DEC '07 - JUN '09	-2	+14	-57%
AVERAGE	-6	+10	-36%

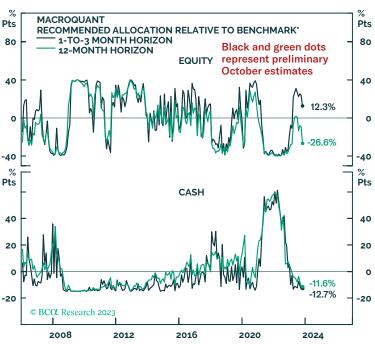
^{*} RELATIVE TO THE START OF NBER-DESIGNATED RECESSIONS.

Profits And Sales Are Growing Again, At Least In Developed Markets



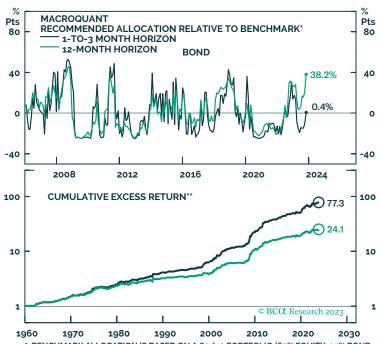


Stocks Should Rally Into Year-End But Then Fizzle Out In 2024



^{*} BENCHMARK ALLOCATION IS BASED ON A 60/40 PORTFOLIO (60% EQUITY, 25% BOND, AND 15% CASH).

NOTE: THE AVERAGE EQUITY ALLOCATION IN THE BACKTEST IS 60.1%.
SOURCE: MACROQUANT 2.0 BETA (ASSET ALLOCATION).



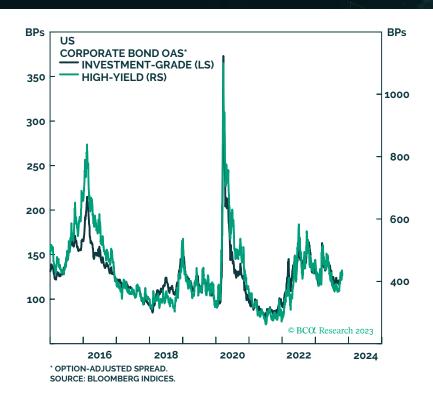
^{*} BENCHMARK ALLOCATION IS BASED ON A 60/40 PORTFOLIO (60% EQUITY, 25% BOND, AND 15% CASH).

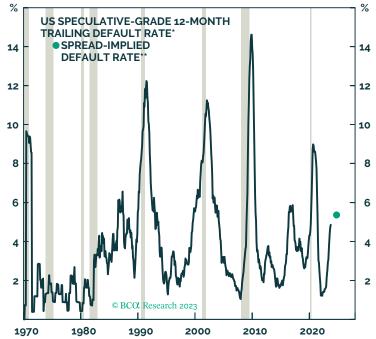
[&]quot;INDEXED TO JANUARY 1960 = 1.0. SHOWN IN LOG SCALE.

NOTE: THE AVERAGE EQUITY ALLOCATION IN THE BACKTEST IS 60.1%.

SOURCE: MACROQUANT 2.0 BETA (ASSET ALLOCATION).

Little Margin Of Safety Left In Corporate Credit





^{*} SOURCE: MOODY'S INVESTORS SERVICE.

^{**} BASED ON CURRENT HIGH-YIELD CORPORATE BOND SPREAD, DEFAULT-ADJUSTED SPREAD OF 100 BPs, AND A 40% RECOVERY RATE.

NOTE: SHADED AREAS DENOTE NBER-DESIGNATED RECESSIONS.

The US Dollar Will Weaken Over The Long Haul, But The Near-Term Outlook Is Less Clear



- * SOURCE: ICE FUTURES US.
- " DEFLATED BY CPI SWAPS AND CORE CPI FOR CANADA AND SWITZERLAND.
- *** WEIGHTED AVERAGE OF THE US DOLLAR DXY INDEX CONSTITUENTS.



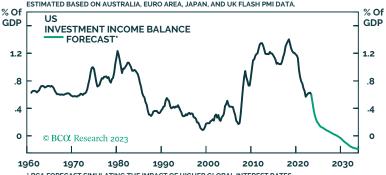
- SOURCE: ICE FUTURES US
- ** BCA PURCHASING POWER PARITY MODEL BASED ON ADJUSTED CPI. PLEASE REFER TO THE FOREIGN EXCHANGE STRATEGY JANUARY 20, 2023 SPECIAL REPORT TITLED "CURRENCY VALUATION AND LONG-TERM RETURNS: PART 1," FOR FURTHER DETAILS.



* SOURCE: ICE FUTURES US.

" ADVANCED BY 7 MONTHS. SOURCE: S&P GLOBAL.

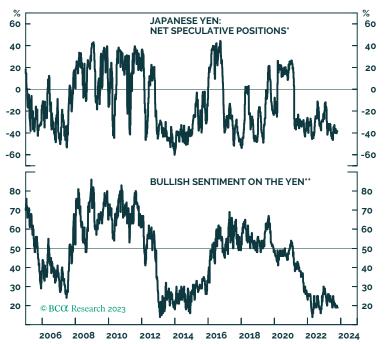
NOTE: BOTH SERIES SHOWN AS A 6-MONTH MOVING AVERAGE. OCTOBER GLOBAL EX. US PMI



BCA FORECAST SIMULATING THE IMPACT OF HIGHER GLOBAL INTEREST RATES ON US NET EXTERNAL INTEREST EXPENSES RELATED TO PORTFOLIO DEBT SECURITIES, WHILE HOLDING CONSTANT THE COMPOSITION OF DEBT ASSETS AND LIABILITIES IN RELATION TO GDP AS WELL AS ALL OTHER COMPONENTS OF THE INCOME BALANCE.

2024: The Year Of The Yen

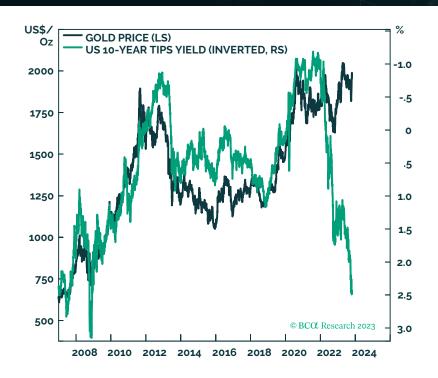


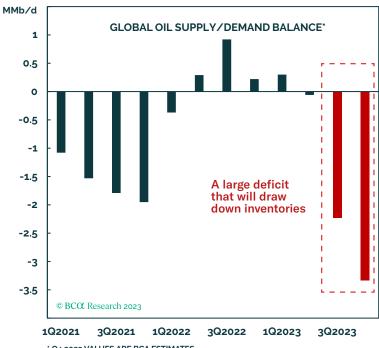


 $^{^{\}star}\,$ AS A PERCENT OF OPEN INTEREST. SOURCE: CFTC.

^{**} SOURCE: MARKETVANE.NET.

Favor Oil Over Gold





^{*} Q4 2023 VALUES ARE BCA ESTIMATES.
SOURCE: OPEC MONTHLY OIL MARKET REPORT (MOMR).

View Matrix

			g	alobal Invest	ment Strategy View	<u>vs</u>
		3-Month		1	2-Month	10-Year
Global Asset Allocation	-	0	+	-	0 +	- 0 +
Equities						
Fixed Income						
Cash						
Global Equities (Region)*	-	0	+	-	0 +	- 0 +
US						
Euro Area						
UK						
Canada						
Australia						
Japan						
EM						
Global Equities (Sectors)*	-	0	+	-	0 +	- 0 +
Communication Services						
Consumer Discretionary						
Consumer Staples						
Energy						
Financials						
Health Care						
Industrials						
Information Technology						
Materials						
Real Estate						
Utilities						

-		ALL Y	1					
		Global Investment Strategy Views						
	3-Month	12-Month	10-Year					
Global Fixed Income**	- 0 +	- 0 +	- 0 +					
Government								
Investment Grade								
High Yield								
Duration								
Inflation Protection								
Currencies***	- 0 +	- 0 +	- 0 +					
USD								
EUR								
GBP								
CHF								
JPY								
CAD								
AUD								
EM Currencies								
Commodities (vs USD)	- 0 +	- 0 +	- 0 +					
Energy								
Base/Bulk Metals								
Gold								

LEGEND:

■ CURRENT

1 (MOST LEFT) - EMERGENCY SELL

2 - STRONG SELL

3 - SELL

4 - NEUTRAL

5 - BUY

6 - STRONG BUY

7 (MOST RIGHT) - EMERGENCY BUY

* RELATIVE TO MSCI ACWI (CURRENCY UNHEDGED).

** RELATIVE TO BLONDMERG GLOBAL AGGREGATE (CURRENCY-HEDGED).

** RELATIVE TO BLONDMERG GLOBAL AGGREGATE (CURRENCY-HEDGED).

** IN TRADE-WEIGHTED TERMS.