

# Macro Voices

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Simplify Asset Management

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# The FED's Master Plan

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The FED recognized that there are only two ways out of a debt crisis – either default or inflate with the caveat that inflation is simply a slow-motion default.

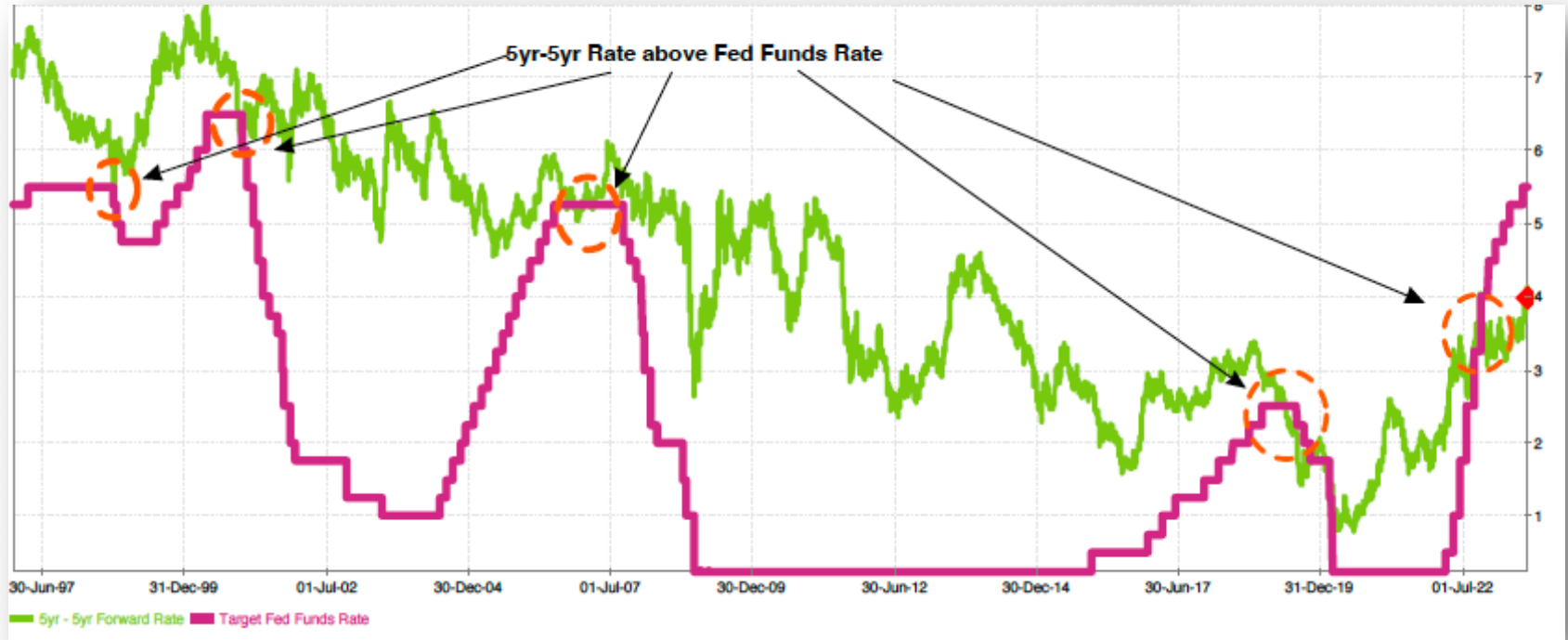
$$\text{GDP} = \text{Money} * \text{Velocity} = \text{Price} * \text{Quantity}$$

$$\text{GDP} = \text{Workers} * \text{Hours} * \text{Productivity}$$

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# Fed Funds Rate vs. 5-Year Forward 5-Year Rate



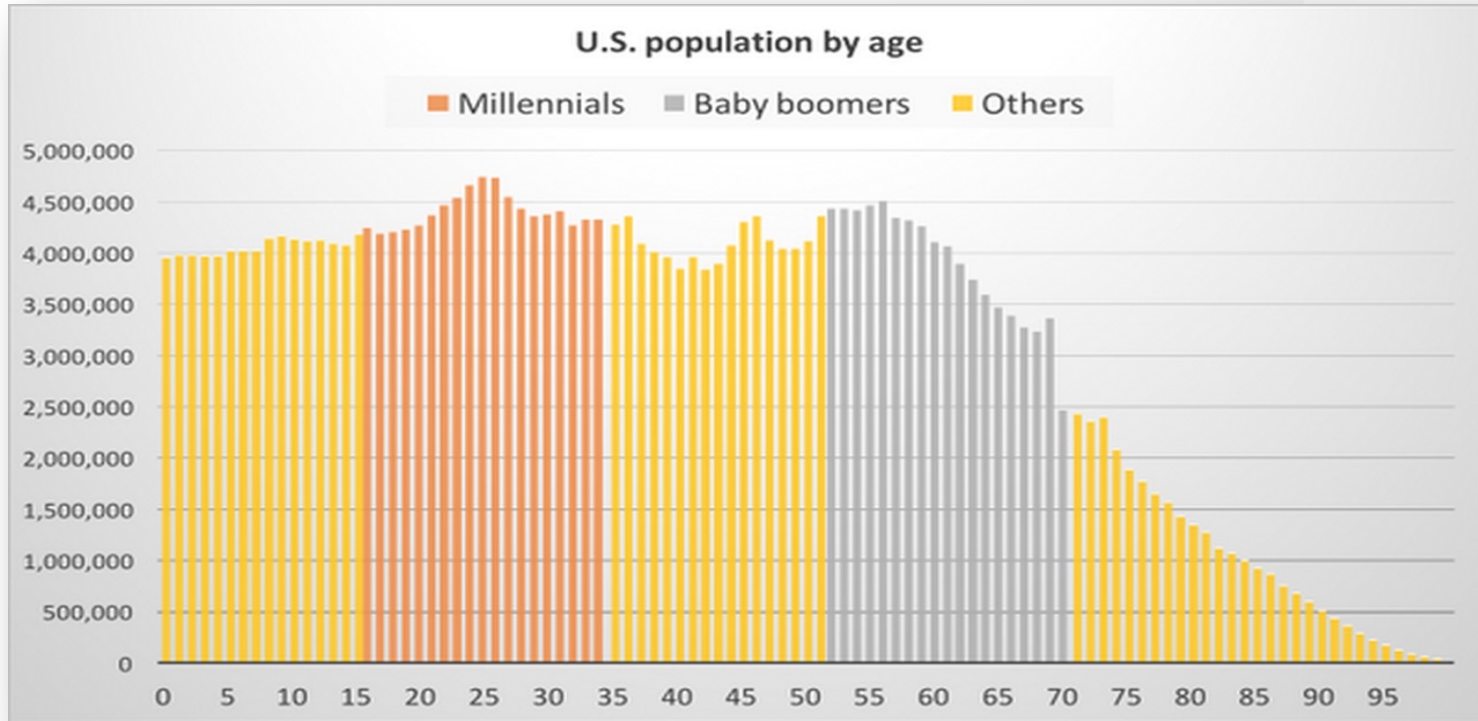
Source: Credit Suisse LOCUS

# Actual Retirements vs. Predicted Trend



Source: Federal Reserve Bank of St. Louis

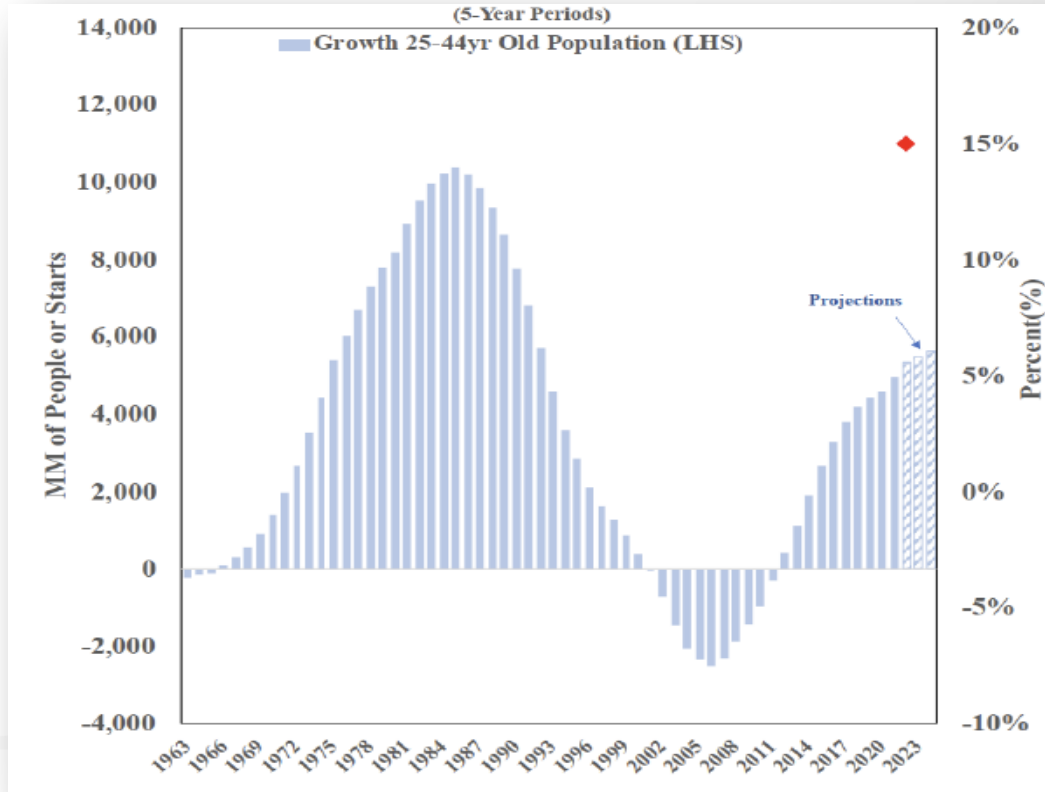
# U.S. Population by Age Cohort



Source: Wall Street Journal

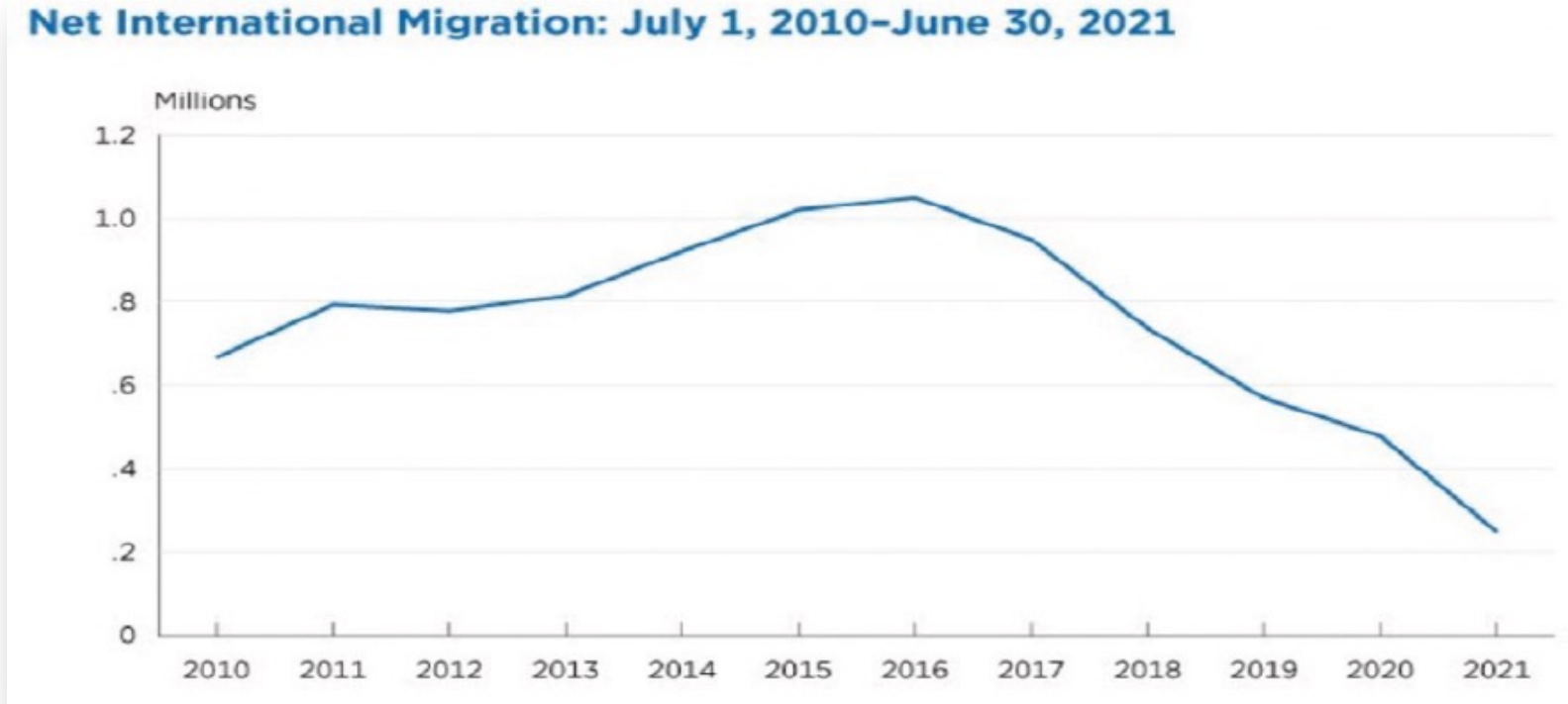


# U.S. Population Growth in 25-44-Year-Old Population



Source: Wall Street Journal

# Net International Migration



Source: U.S. Census Bureau, Vintage 2021 Population Estimates



# The Three Risk Vectors

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When making an investment decision in the bond market, there are only three risk vectors to consider:

- 1) Duration – When one receives their money back;
  - 2) Credit – If one receives their money back;
  - 3) Convexity – How one receives their money back.
- 



When a bond matures is often used as a proxy for **Duration risk**, but more precisely it measures the bond's price sensitivity to interest rate changes.

**Credit risk** is rather straight forward; it measures the chance of a default and the loss of one's investment.

**Convexity risk** is a bit tricky since it is mostly found embedded in callable bonds and can be challenging to measure; but the bottom line is that such bonds (mostly Mortgage and Municipal) presently offer the best relative value.

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# U.S. Treasury Yield Curve

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Source: Investopedia



# UST 1.125% 08/15/2040



Source: Bloomberg



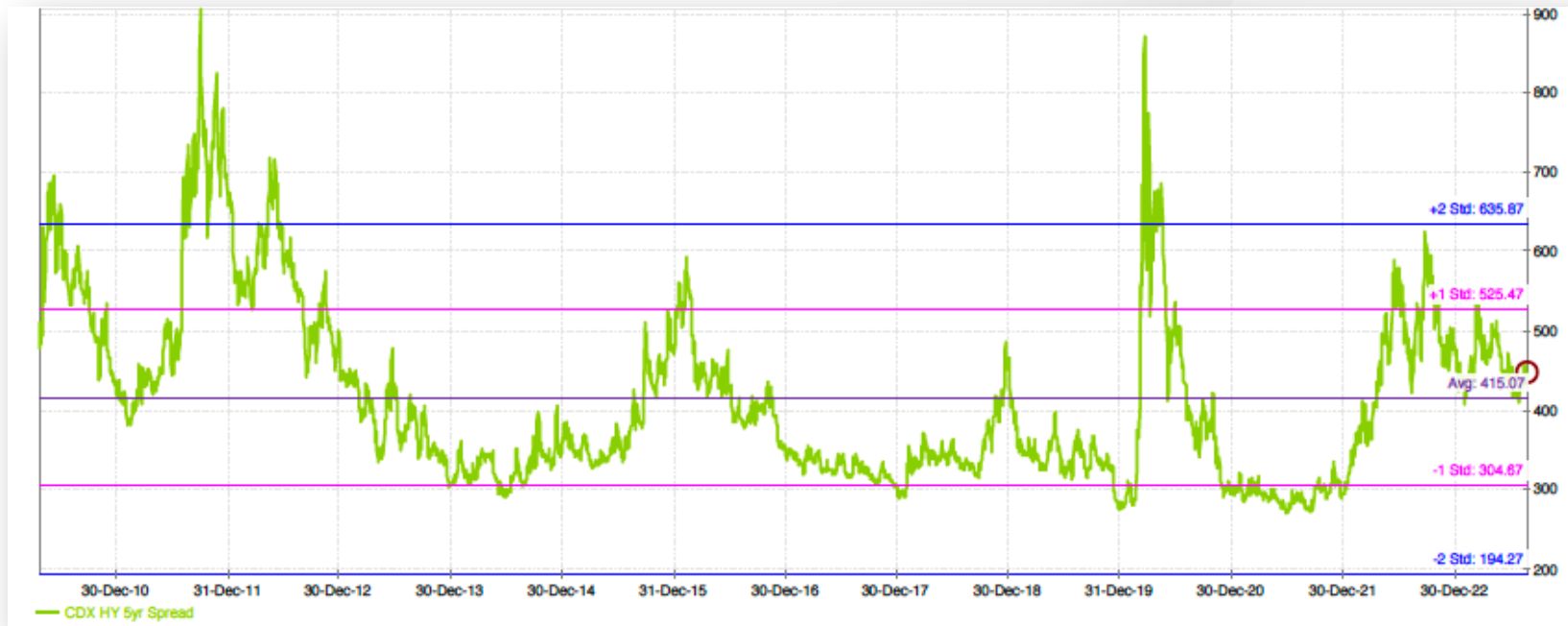
# 5-Year IG Credit Spread



Source: Credit Suisse LOCUS



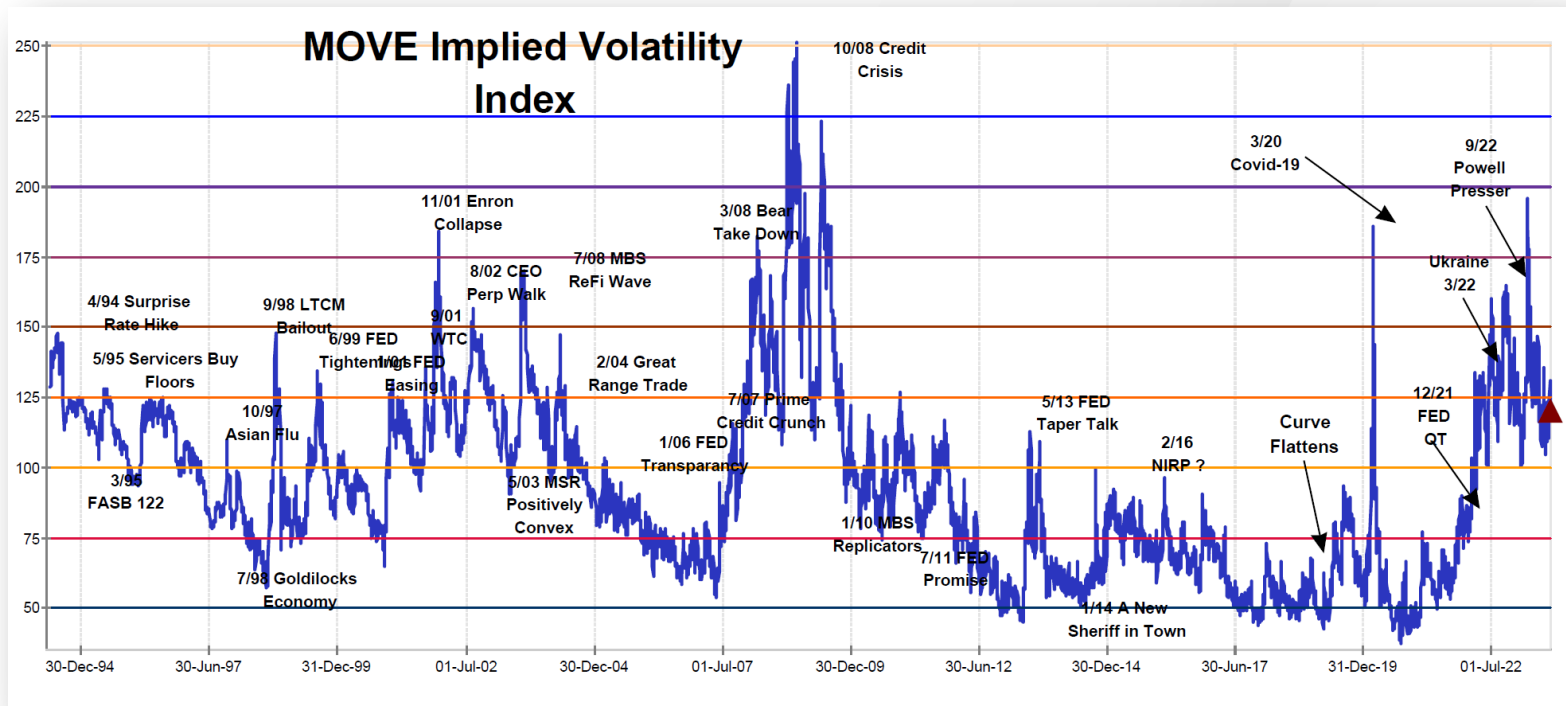
# High Yield (HY) Credit Spread



Source: Credit Suisse LOCUS

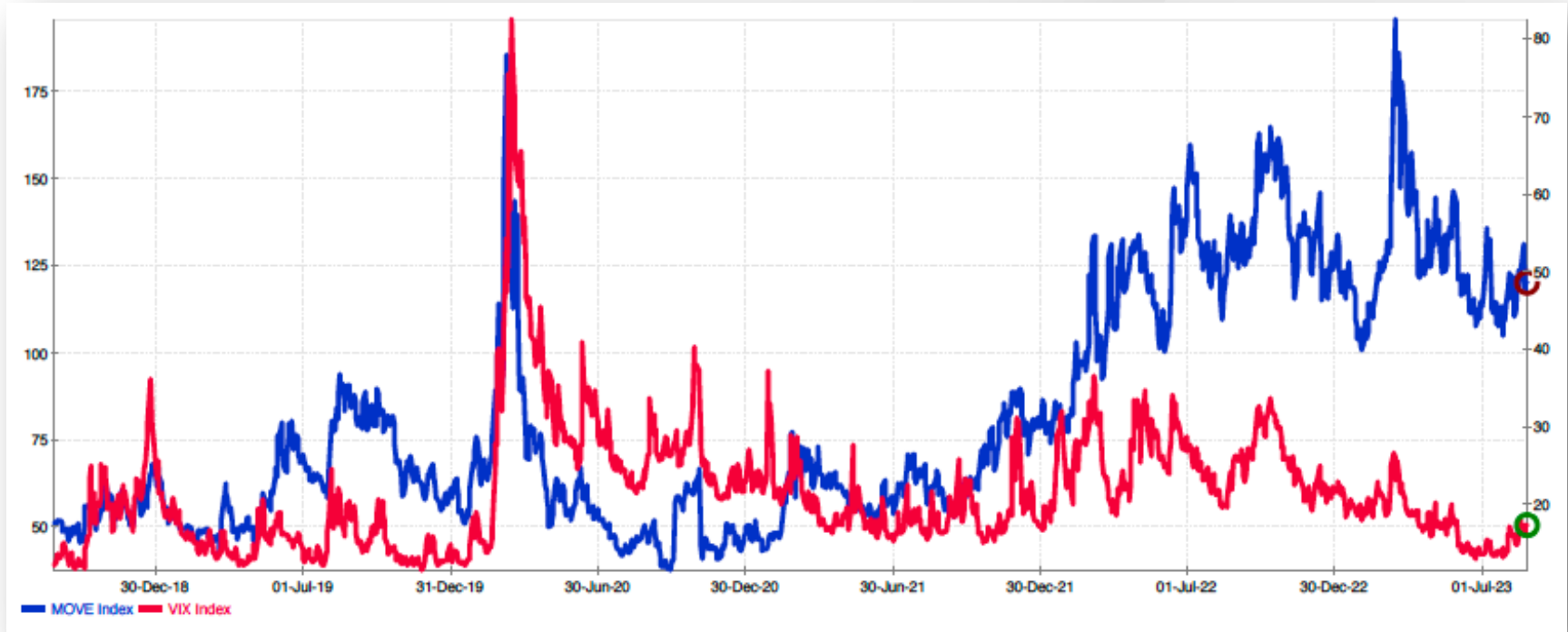


# Move Implied Volatility Index



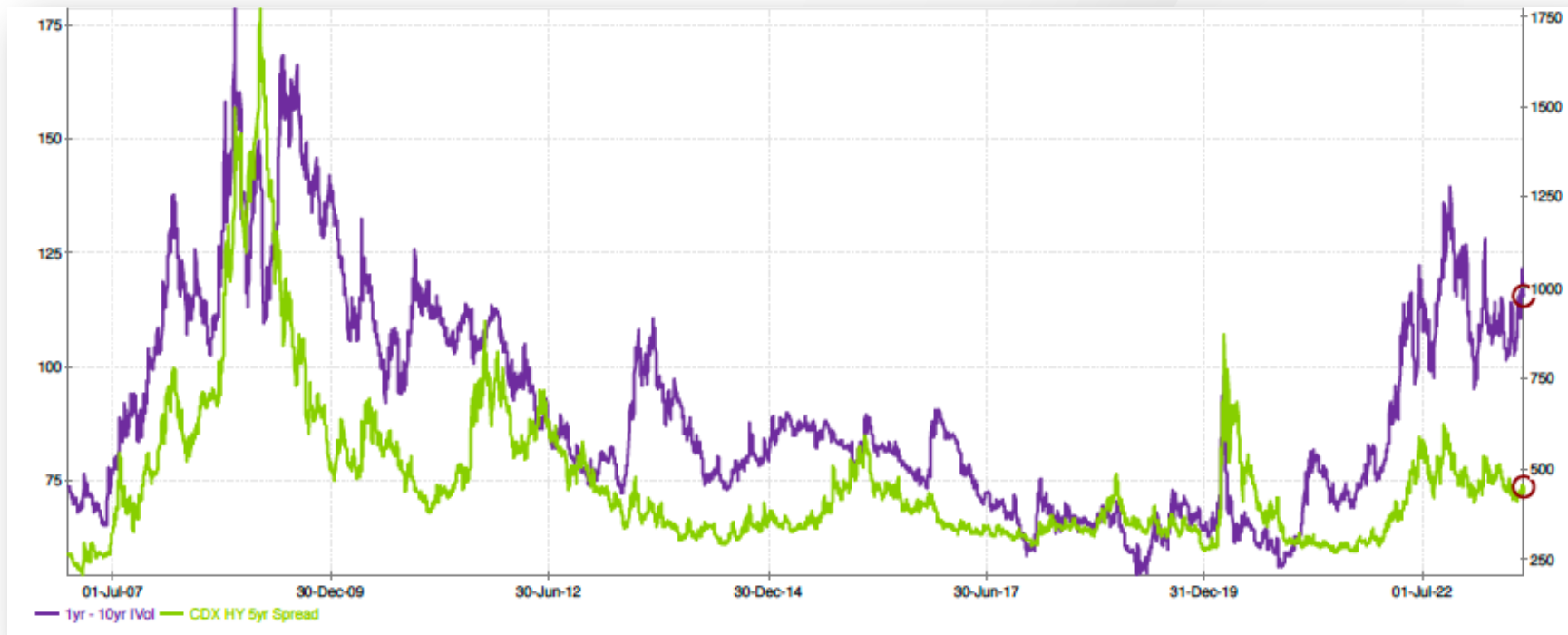
Source: MOVE

# Move Index vs. VIX Index



Source: MOVE

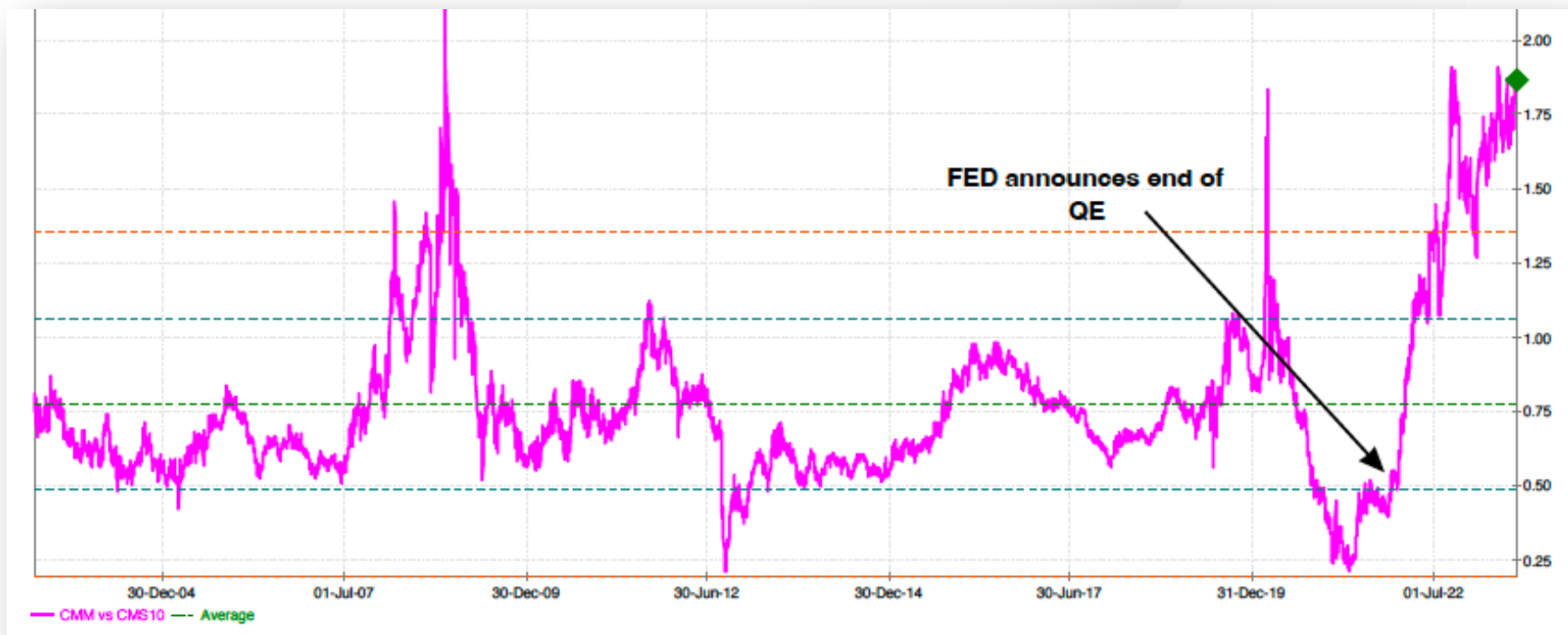
# Interest Rate Volatility vs. HY Credit



Source: Credit Suisse LOCUS



# MBS Rate vs. 10-Year Rate



Source: Credit Suisse LOCUS



# What Is a Forward Rate?

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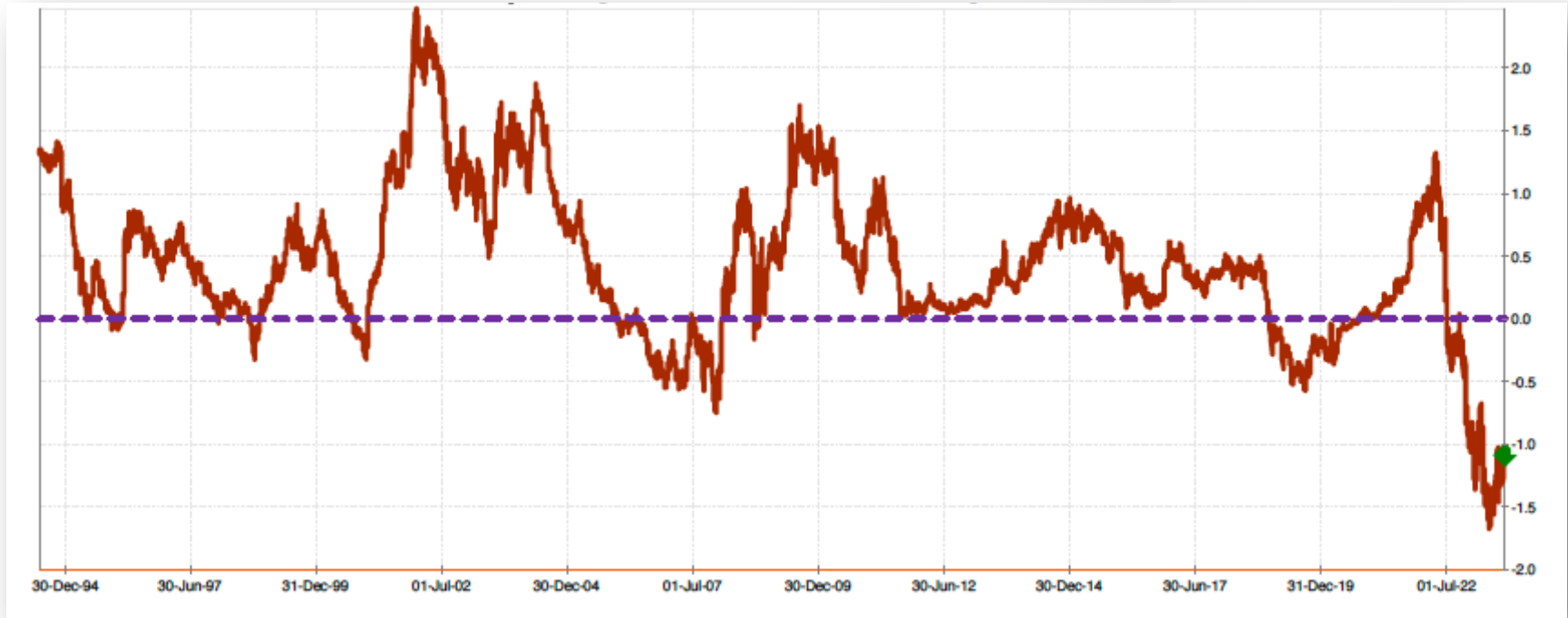
As detailed in [“Dangerous Curves”](#) – February 15, 2022: “Forwards are NOT a prediction, rather they are the simple mathematical discounting of the Spot Curve to produce an “arbitrage-free” price, no more, no less.”

In a nutshell, if Grandma can buy a one-year CD at 2% or a two-year CD at 3%, she would only buy the one-year CD if she thought she could buy another one-year CD next year at 4% or higher. We would call this 4% rate the one-year rate one year forward (or the break-even rate).

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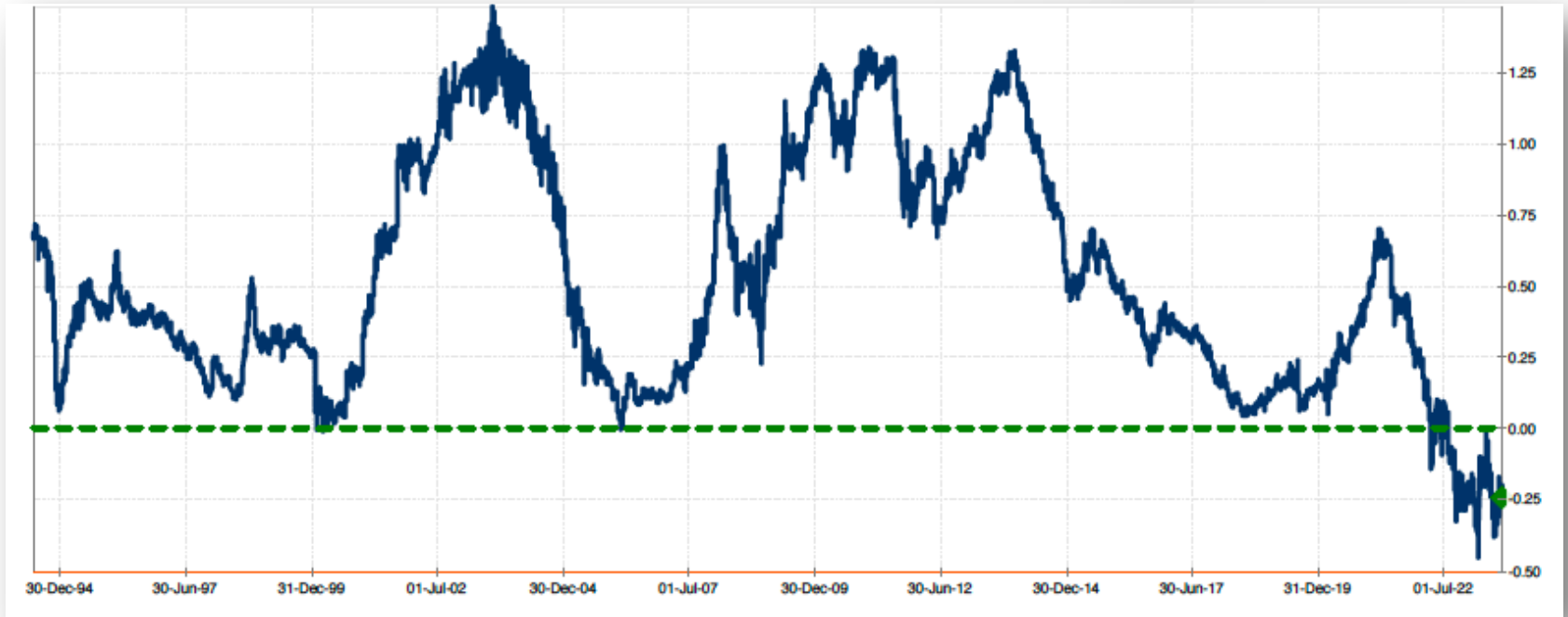
# Spot 1-Year Rate vs. Forward 1-year Rate



Source: Credit Suisse LOCUS



# 10-Year Rate vs. 3-Year Forward 10-Year Rate



Source: Credit Suisse LOCUS

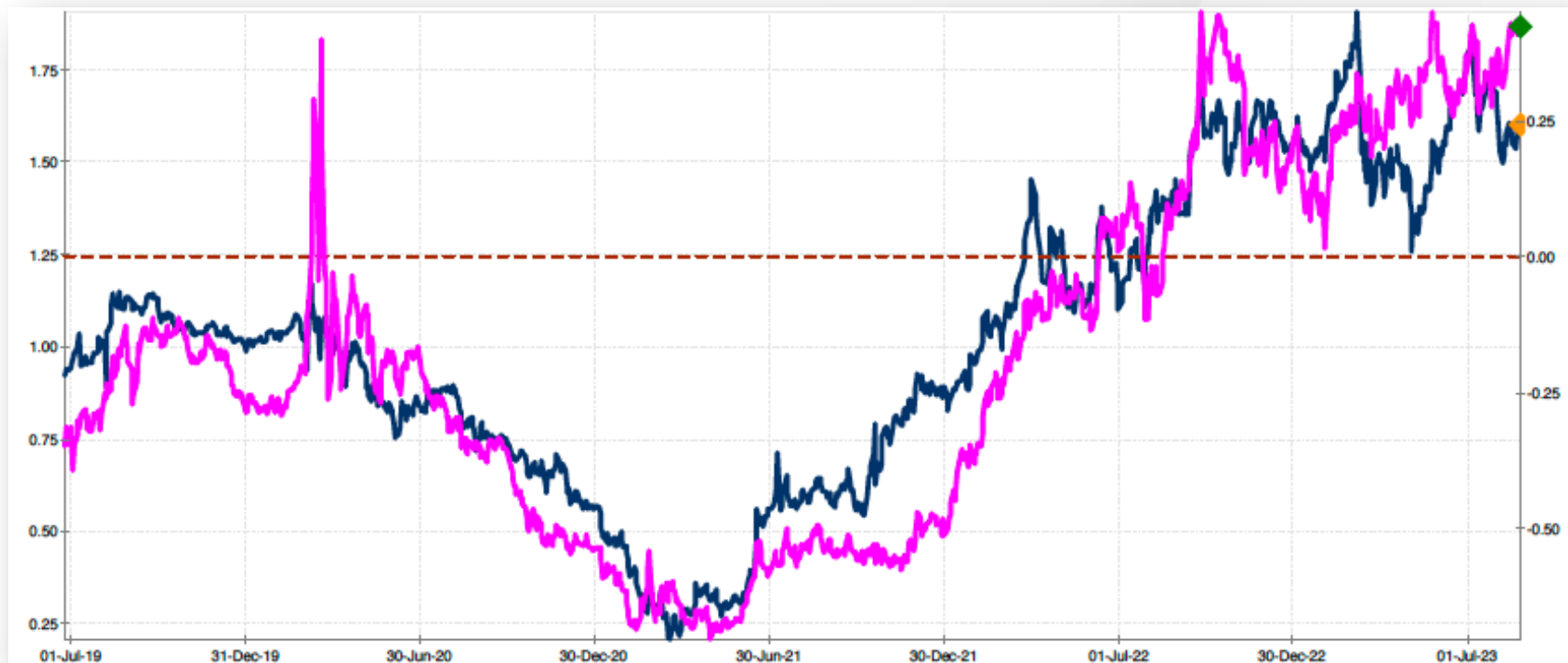


# Implications of a Steeper Yield Curve

	<u>~Current Curve</u>	<u>HB Twisted Curve</u>		
	<u>Rate</u>	<u>Rate</u>	<u>Change</u>	
Fed Funds	5.00%	2.00%	-3.00%	
1m	5.25%	2.25%	-3.00%	
3m	5.25%	2.25%	-3.00%	
1yr	5.10%	2.25%	-2.85%	
2yr	4.50%	2.50%	-2.00%	
3yr	4.00%	2.75%	-1.25%	
5yr	3.75%	3.00%	-0.75%	
7yr	3.60%	3.25%	-0.35%	
10r	3.50%	3.50%	0.00%	
20yr	3.50%	3.60%	0.10%	
25r	3.40%	3.55%	0.15%	
30yr	3.30%	3.50%	0.20%	
40yr	3.10%	3.50%	0.40%	
3yr - 10yr Rate	3.31%	3.85%	0.54%	
5yr - 20yr Rate	3.27%	3.75%	0.48%	
3y - 10yr Call Option	Px = 6.01	PX = 4.06	-1.95	K = 3.50% Ivol = 100
5yr - 20yr Call Option	Px = 10.32	Px = 7.37	-2.98	K = 3.50% Ivol = 80

Source: Bloomberg

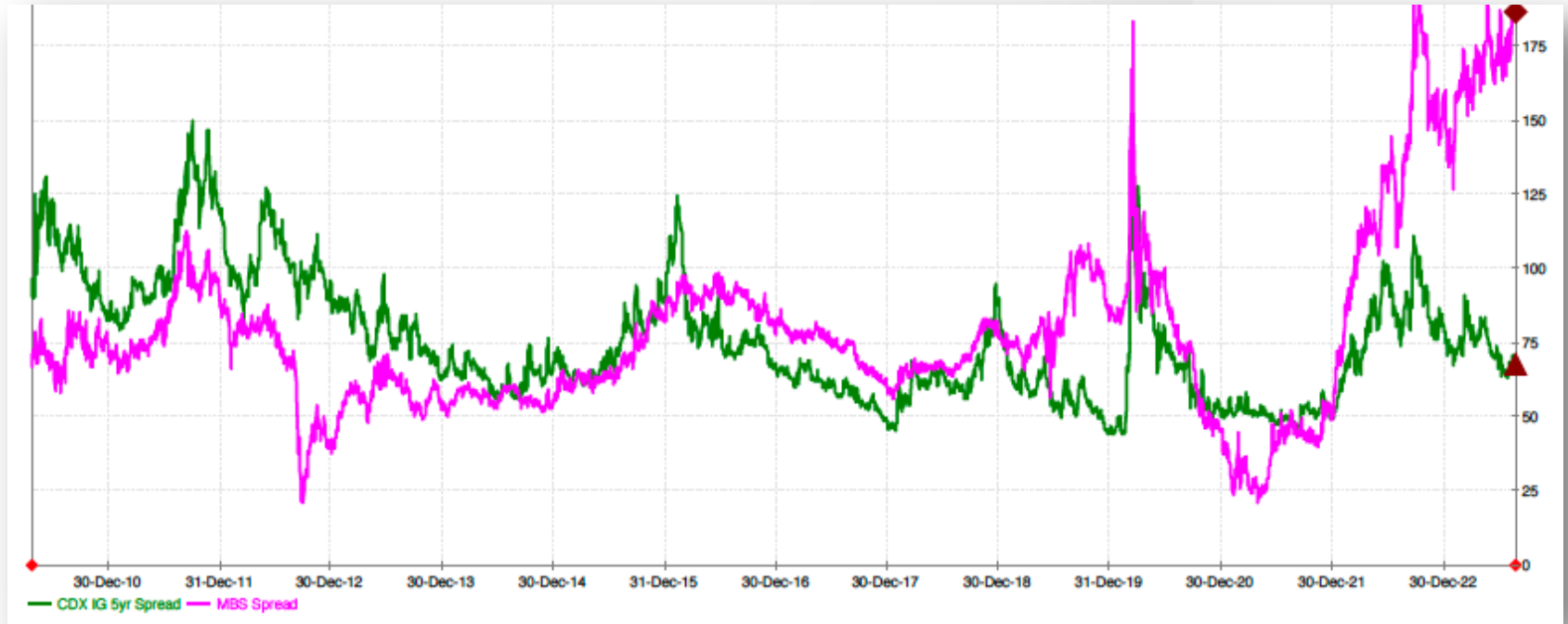
# MBS Spread vs. Yield Curve



Source: Credit Suisse LOCUS



# MBS Spread vs. IG Credit Spread



Source: Credit Suisse LOCUS



# MBS Index vs. Newly Issued MBS

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## MBS Index:

Price ~ **85.5**

Coupon ~ **3.0%**

Distribution ~ **3.5%**

Effective Duration **7.5**

Yield to Maturity ~ **4.85%** (+60bp UST)

## Newly Issued MBS:

Price ~ **98**

Coupon ~ **5.5%**

Distribution ~ **5.6%**

Effective Duration ~ **4.2**

Yield to Maturity ~ **5.85%** (+160bp UST)

Source: Bloomberg



# SPX Put Options Cheaper as the Interest Rates Rise

30 Pricing

32 Scenario

33 Matrix

34 Volatility

35 Backtest

Underlying

Und. Price

Results

Price (Total)

Price (Share)

Price (%)

American Vanilla

Style

Exercise

Call/Put

Direction

Strike

Strike

Shares

Expiry

Time to Expiry

Model

Vol

Forward

USD Rate

Dvd Yld+Mgmt fee

Discounted Div Flow

Borrow Cost

SPY US Equity

Mid

447.2250

USD

29.78

29.7761

6.6580

Leg 1

Vanilla

American

Put

Buy

425.0000

4.97% OTM

1.00

10/18/2022

365

00:00

BS - disc.

BVOL

Ask

21.470%

Carry

441.0576

HHkt

0.124%

1.525%

6.72

0.000%

SPDR S&P 500 ETF

Trade

Settle

10/18/2021

16:30

1.70

-0.05

-0.02

Vega

Theta

Rho

Time Value

Gearing

Break-Even (%)

29.78

15.02

-11.63

30 Pricing

32 Scenario

33 Matrix

34 Volatility

35 Backtest

Underlying

Und. Price

Results

Price (Total)

Price (Share)

Price (%)

American Vanilla

Style

Exercise

Call/Put

Direction

Strike

Strike

Shares

Expiry

Time to Expiry

Model

Vol

Forward

USD Rate

Dvd Yld+Mgmt fee

Discounted Div Flow

Borrow Cost

SPY US Equity

Mid

447.4150

USD

17.94

17.9435

4.0105

Leg 1

Vanilla

American

Put

Buy

425.0000

5.01% OTM

1.00

08/13/2024

365

03:14

BS - disc.

BVOL

Ask

19.071%

Carry

464.3129

HHkt

5.378%

1.589%

6.99

0.000%

SPDR S&P 500 ETF

Trade

Settle

08/14/2023

13:16

1.54

-0.04

-0.01

Vega

Theta

Rho

Time Value

Gearing

Break-Even (%)

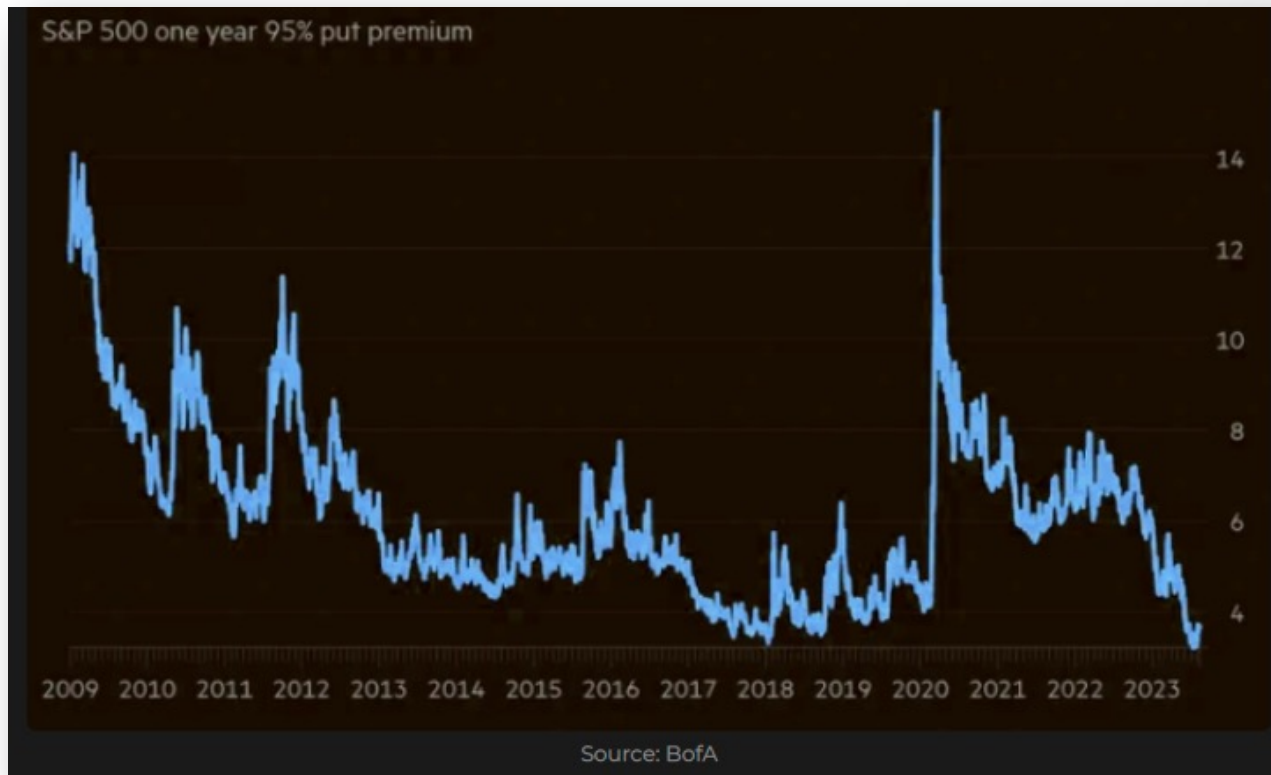
17.94

24.93

-9.02

Source: Bloomberg

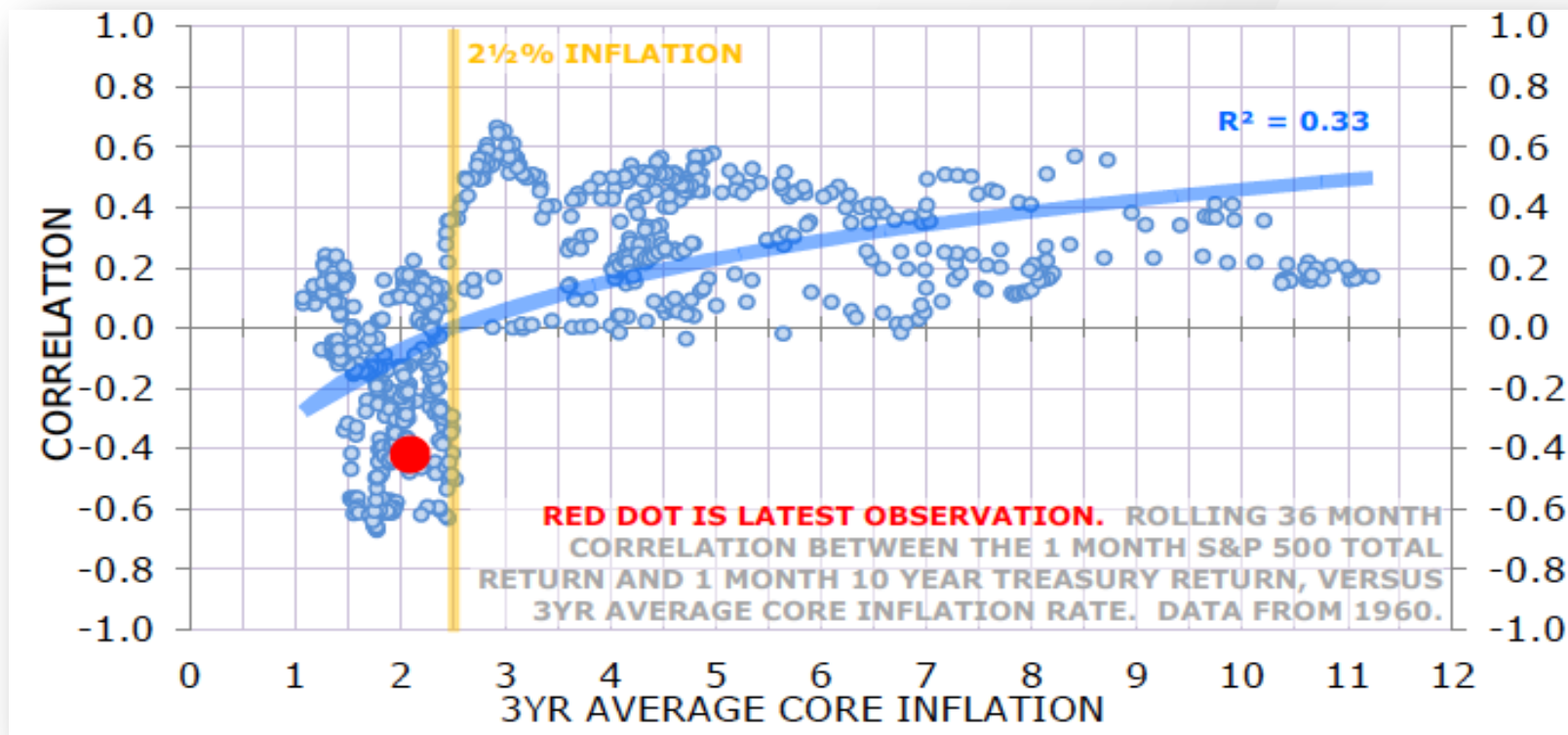
# S&P 500 Hedges Cheapest Since at Least 2008



Source: Bank of America

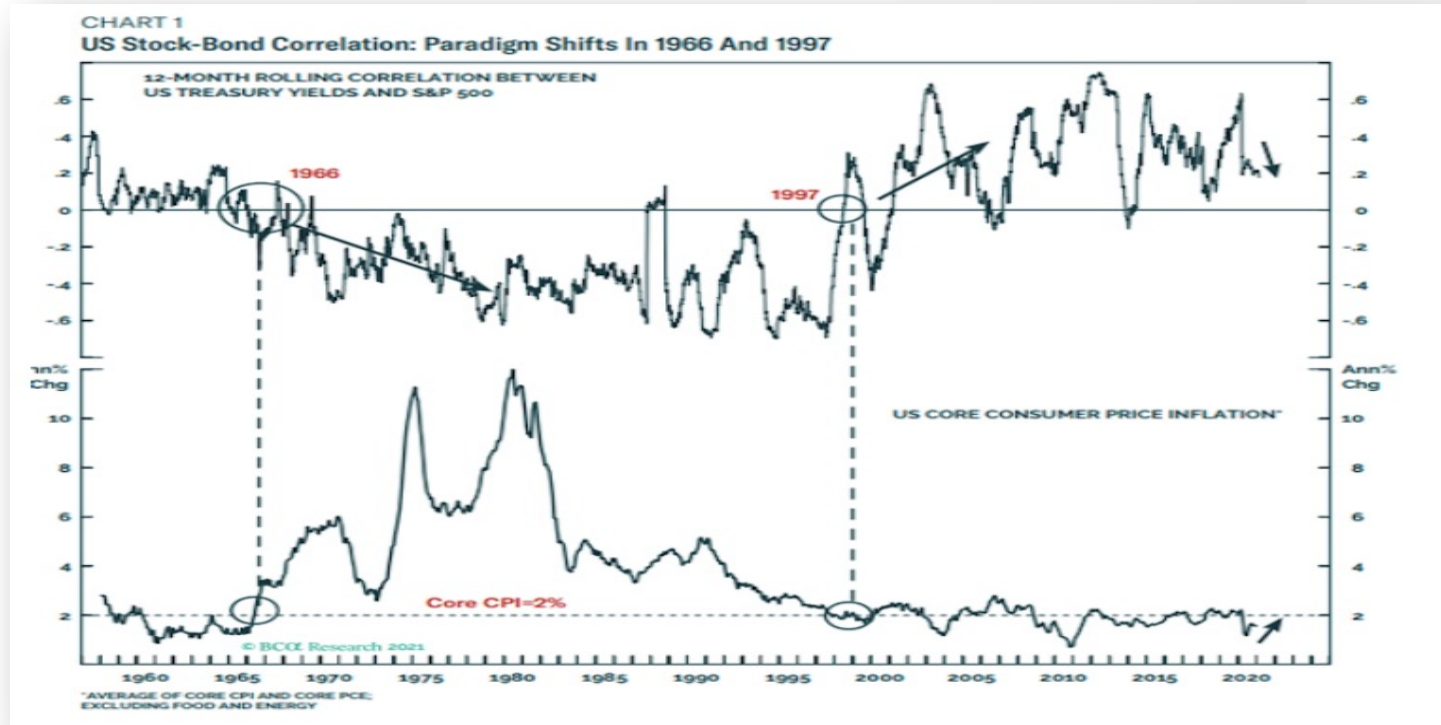


# U.S. Equity vs. Bond Correlation and Core Inflation



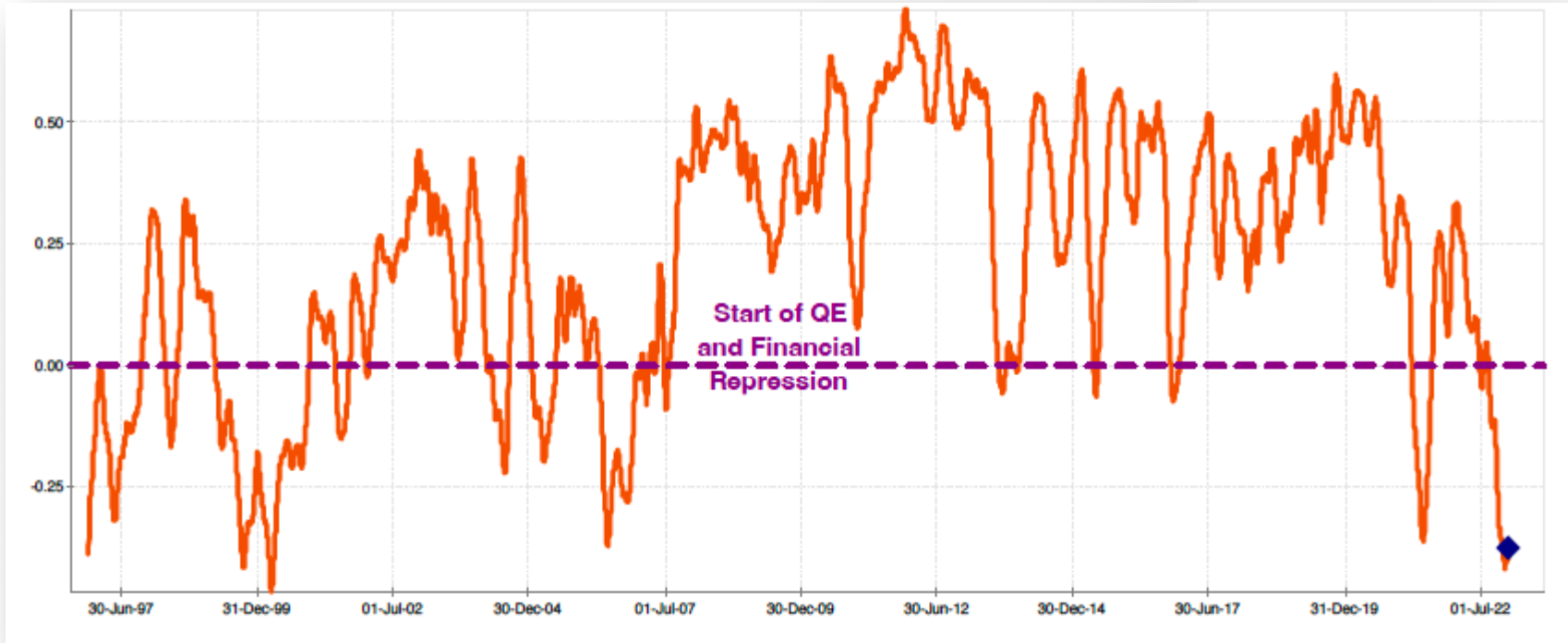
Source: S&P, Bloomberg-Barclays, GFD, BLS; Minack Advisors

# U.S. Stock vs. Bond



Source: Bank of America

# Correlation of SPX and 10-Year Yield



Source: Credit Suisse LOCUS



# Public Policy Benefits of a Steeper Yield Curve

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- A steeper Yield Curve supports the plumbing of our financial system.
  - Higher long-term interest rates improve the health of our pension and insurance systems.
  - Higher long-term rates make private long-term health care policies more affordable and thus reduce the reliance upon Medicare.
  - It is a public policy benefit for corporate borrowers to enhance retirement income via higher interest rates, and thus reduce the need for Government assistance.
  - Yield Curve Control conceals market information and encourages Moral Hazard, to the detriment of both policy makers and investors.
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# *Sizing Is More Important Than Entry Level*

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# Contact Information

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*"I'm looking for a hedge against my hedge funds."*

# THANK YOU!



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