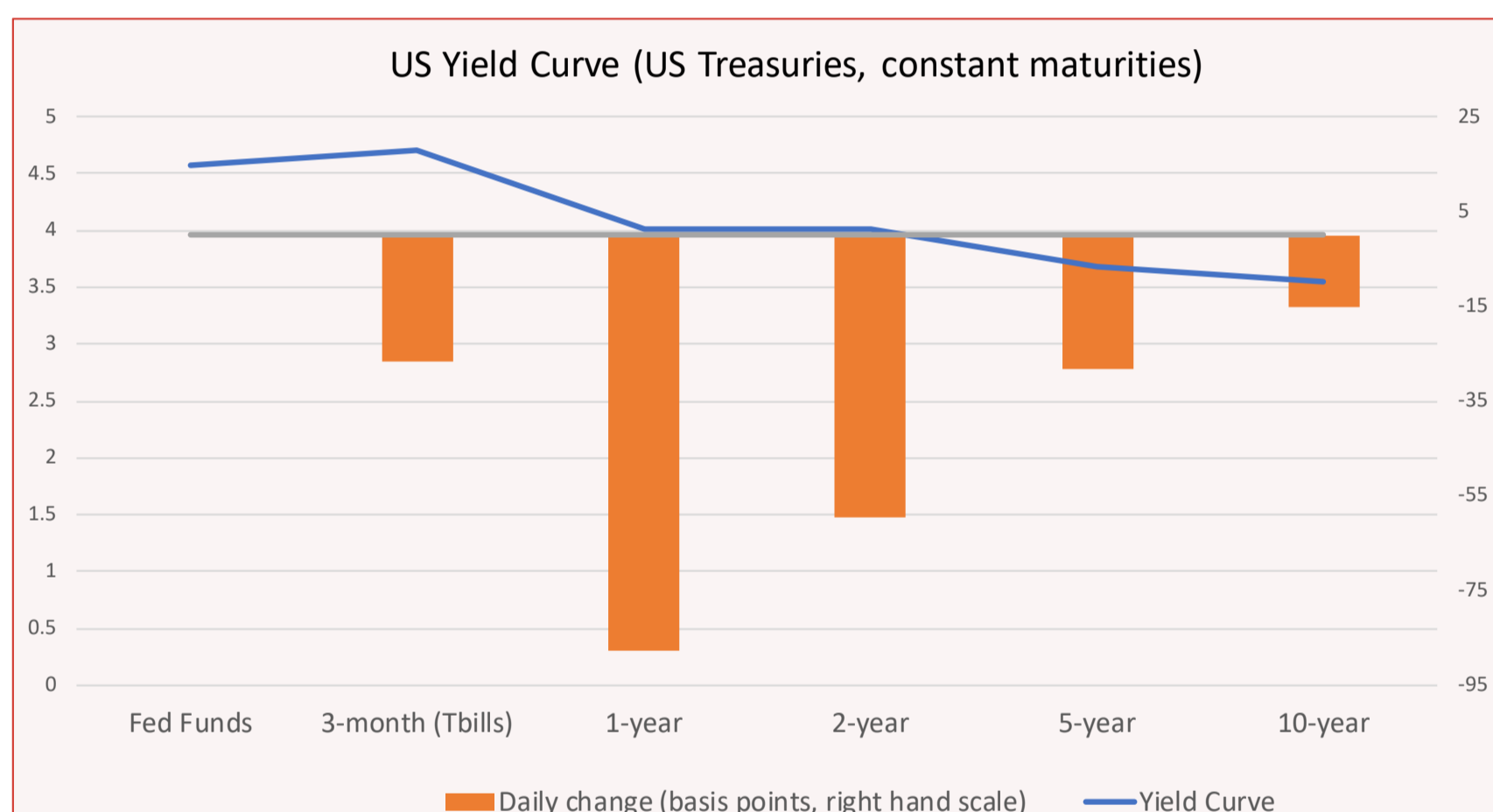


# RISK PREMIUM INVEST

## Daily analysis of the US Treasuries Market

13 March 2023

	Fed Funds	3-month (Tbills)	1-year	2-year	5-year	10-year
Rates	4.57	4.71	4.02	4.01	3.69	3.55
Daily changes (bp)	0	-27	-88	-60	-28	-15



Source: Federal Reserve, H15. (with small tweaks to smooth out the impact of benchmarks changes).

### Highlights:

- US Treasury yields fell sharply on Monday particularly for one-year and two-year bonds.
- Due to financial instability, investors now expect the Fed to stabilize rates in the short term and to cut them quickly by 100 basis points over the coming year.

PART I : Changes in expected Fed Funds.

PART II : Risk premia contributions.

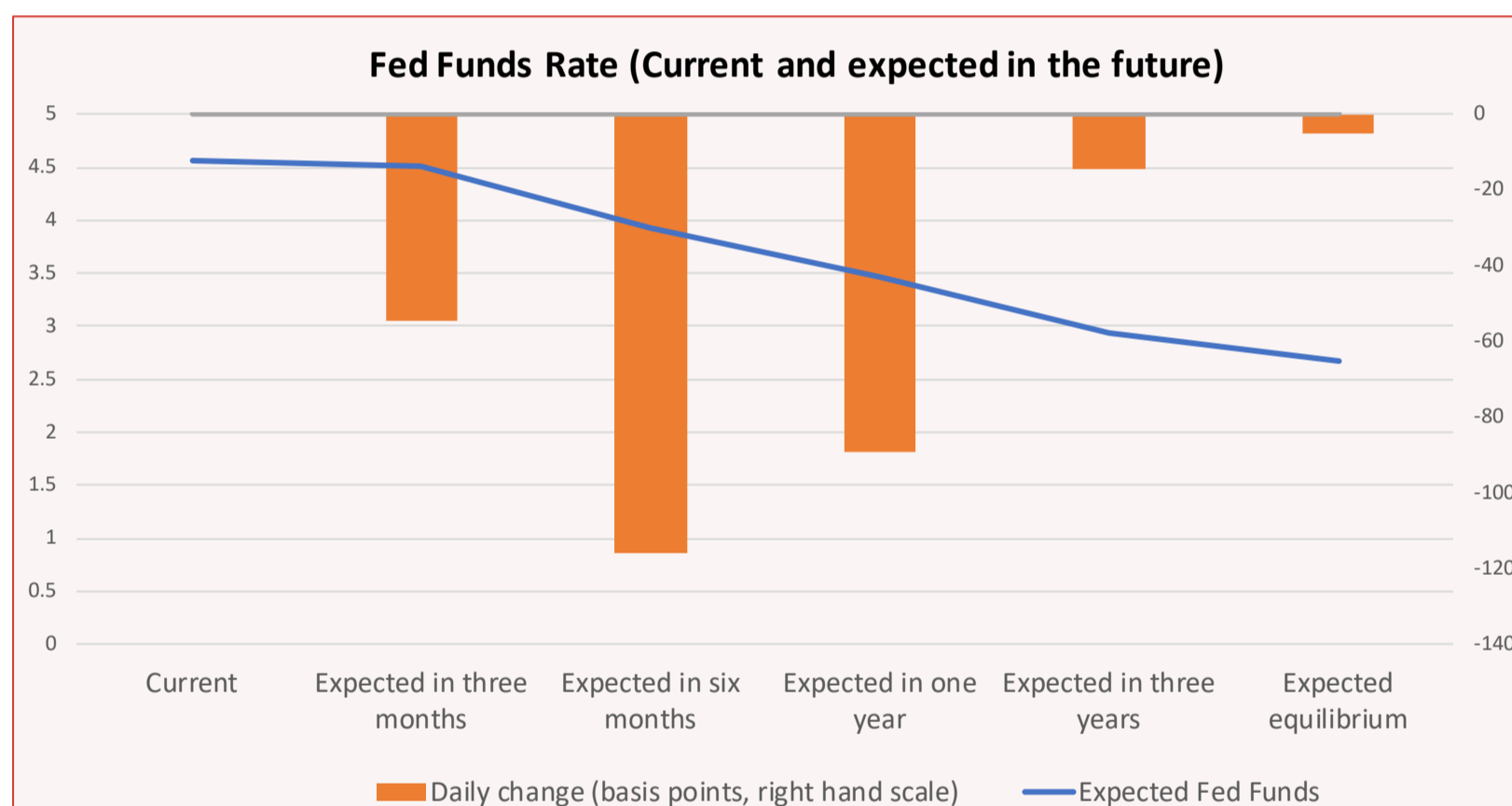
PART III : Methodological annex.

## PART I : CHANGES IN EXPECTED FED FUNDS

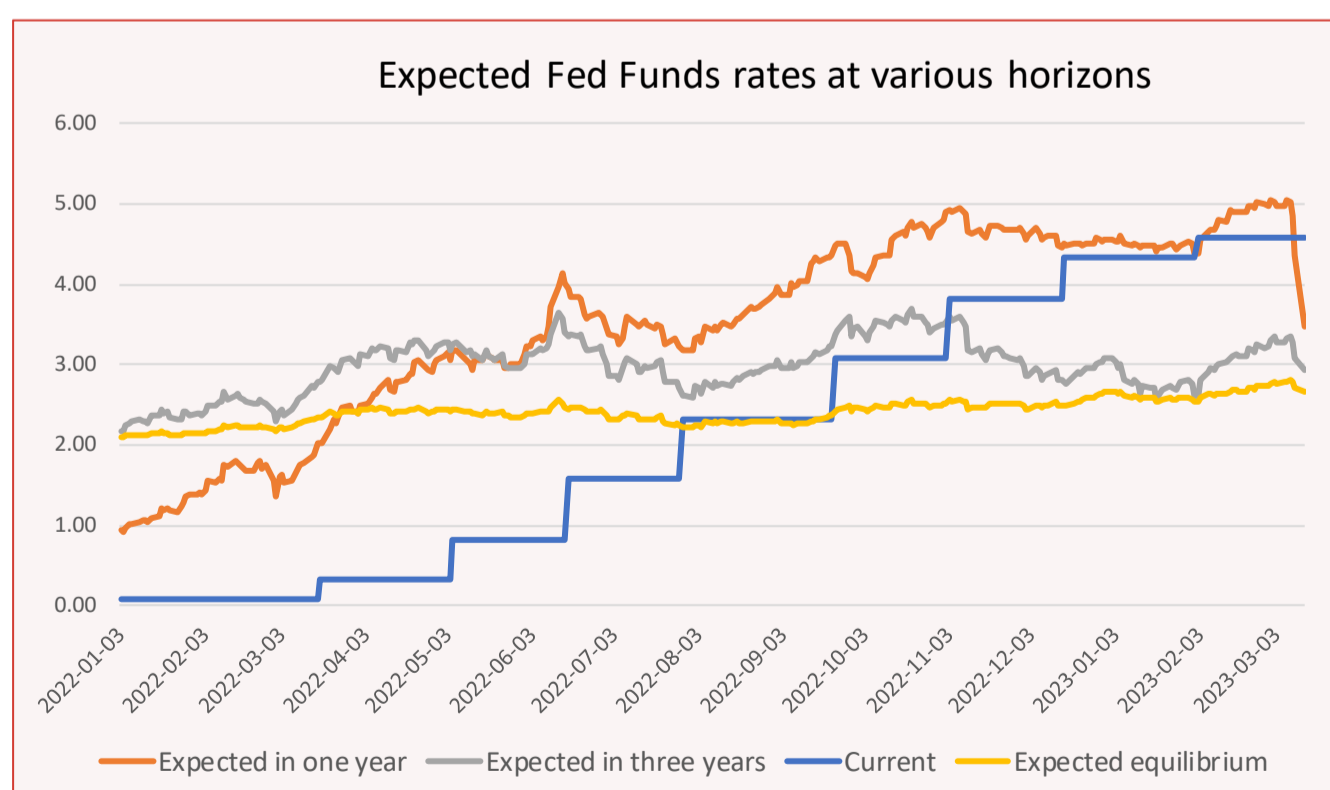
Fed funds futures provide a biased estimate of investors' true expectations, as they are influenced by varying risk premia. The Fed Funds rates expected by investors are here estimated by our proprietary model using both different surveys (the monthly "Consensus Economics" survey and the quarterly "Survey of Professional Forecasters") and the rich information contained in the yield curve (see the methodological annex). Estimates are revised when more recent surveys become available (on February 16, the February "Consensus Forecast" and "Survey of Professional Forecaster" were introduced).

On Monday, expectations for future Fed funds rates collapsed. At the end of an incredibly volatile day, expectations at the 6-month horizon were down 116 basis points. The run on SVB and Signature Bank following their very poor management of interest rates risk is a major event that illustrates many flaws in the regulations put in place after the 2008-2009 financial crisis. How can the banking sector be expected to be robust if it is significantly financed by uninsured deposits threatened by the new complex resolution processes put in place to "bail-in" creditors? In this new regime, any big mistake in risk management, or/and in supervision, is logically sanctioned by a massive run (and shareholders' refusal to put more money in the game). So, after years of talking about the need to end the "too-big-to-fail" policy, the US government was forced this weekend to offer a general implicit guarantee to all deposits. In a few hours, an interesting baroque new system was born in which deposits of any size are guaranteed, but bondholders remain fully exposed to the "bail-in" process... This is not sustainable, and the major events of the last few days will probably lead to some very big changes in how banks are regulated. So, this is not a "storm in a cup of tea". That said, the implications of these events for the US monetary policy are ambiguous and expectations for future Fed funds rates are likely to remain volatile in the coming days. On the one hand, the new guarantees and lending facilities provided by the government may stabilize the financial system and allow the Fed to continue raising rates. On the other hand, shareholders and bond holders are in no way the beneficiaries of the government U-turn and this may lead some of the banks to be very cautious in the way they manage their balance sheets. In other words, the Fed may fear some credit rationing and become a bit more dovish.

	Current	Expected in three months	Expected in six months	Expected in one year	Expected in three years	Expected equilibrium
<b>Fed Funds</b>	4.57	4.51	3.93	3.47	2.94	2.66
<b>Daily changes (bp)</b>	0	-55	-116	-89	-15	-5



Investors now expect the Fed to stabilize rates in the short term and to cut them rapidly by 100 basis points in the coming year. We tend to believe that this is an aggressive forecast. However, the US macroeconomic situation was already extremely uncertain before the banking panic of the past few days and, as we have briefly discussed, the consequences of these events are difficult to assess.



Main market-moving news: 13 March 2023

### US Macroeconomics

### Others

After SVB, Signature Bank was closed during the weekend, but the US government announced that uninsured deposits would be guaranteed at both banks.

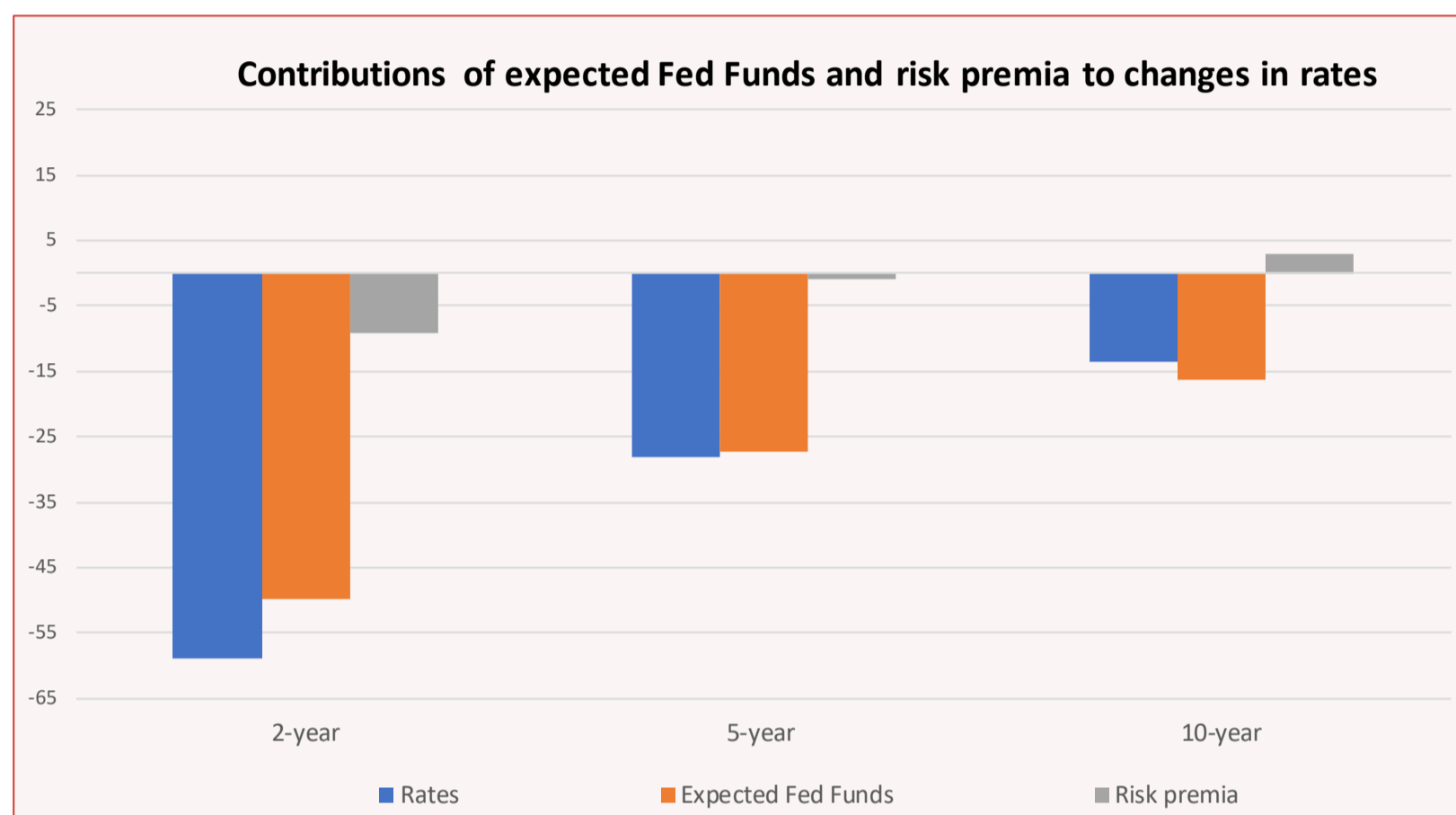
## PART II : RISK PREMIA ANALYSIS

For US Treasuries, as for all financial assets, there are two key different types of risk premia:

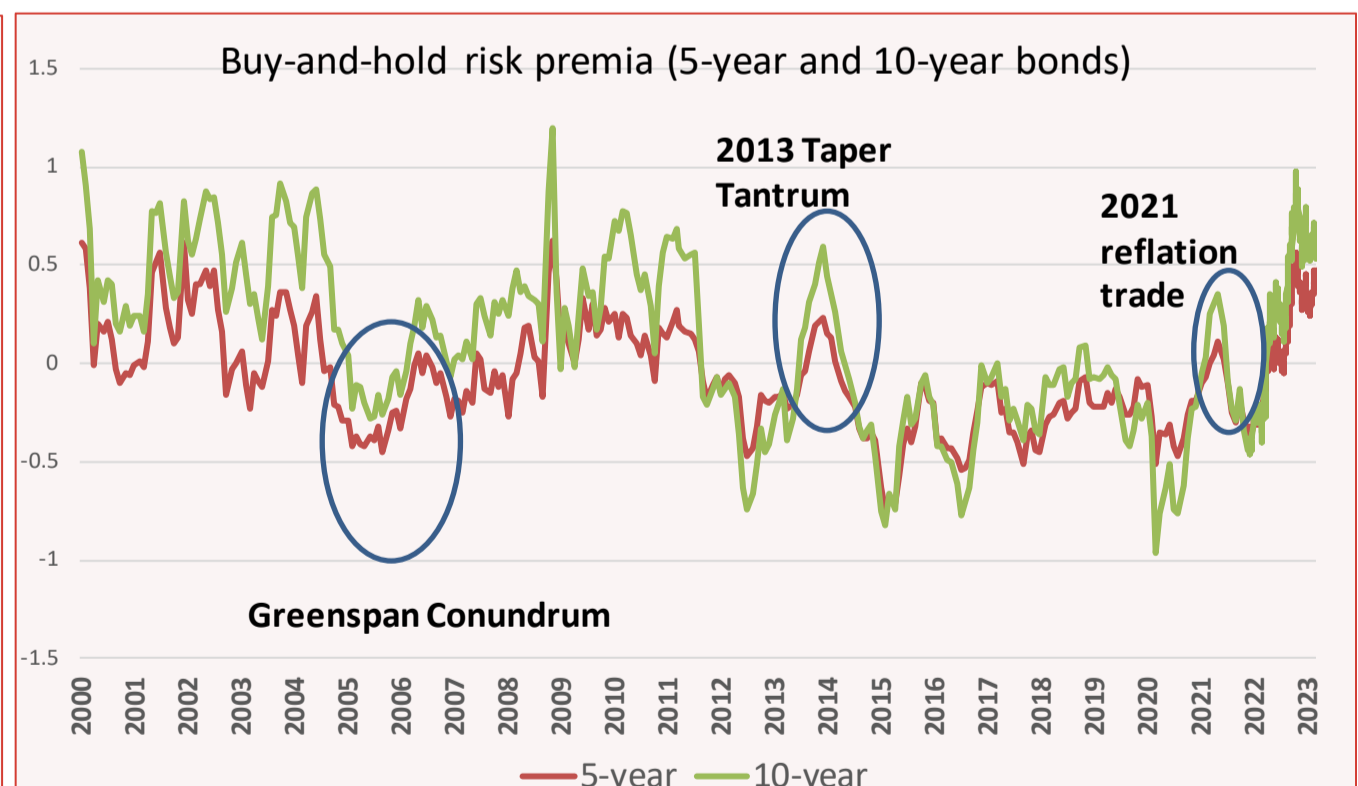
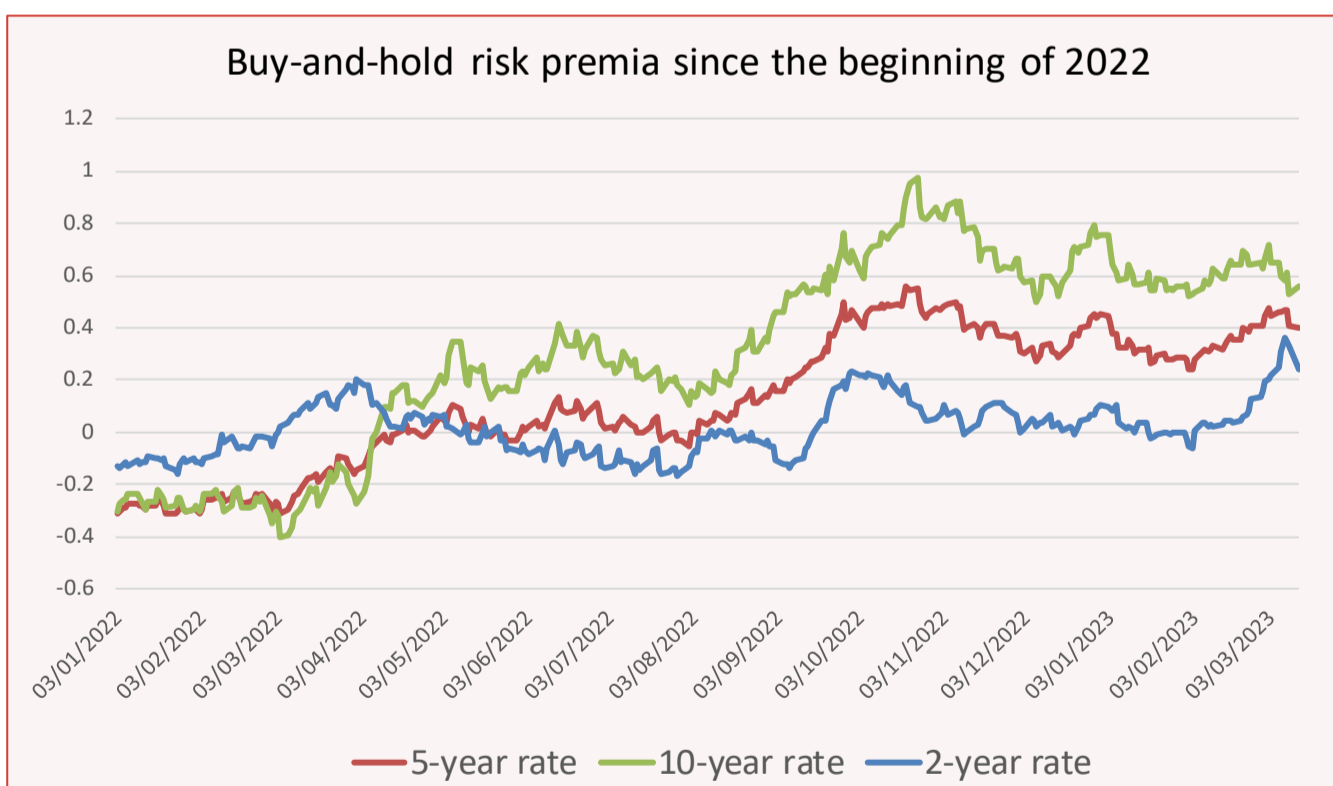
- The short-term **tactical risk premia**: How much excess returns investors require to hold various risky assets at their tactical horizon (which depends on investors, but is often around 3 months)? The tactical positions taken by investors relative to their benchmarks (“neutral”, “short”, “long”) depend on these tactical risk premia.
- The **“buy-and-hold” or “embedded” risk premia**. How much excess return **long-term investors** expect if they hold risky assets over an extended horizon? In the case of US Treasuries, the buy-and-hold risk premia are the differences between the zero-coupon rates of various maturities and the (annualized) expected return on a fund invested in Fed Funds over the same period.

We estimate both types of risk premia (see the methodological annex and our excel file) but we discuss here only the buy-and-hold risk premia.

Most of Monday’s impressive decline in rates was apparently driven by expectations for future Fed funds rates. Risk premia on US Treasuries were broadly stable. Currently, there is a lot of ambiguity on how US treasuries risk premia react to bad news. On the one hand, bonds are currently seen as risky assets and often move with equities in the “risk-on” or “risk-off” cycle. But, on the other hand, US Treasuries sometimes benefit from the traditional “flight-to-safety” mechanism and risk premia then fall when investors sell other risky assets.



	2-year	5-year	10-year
<b>Buy-and-hold risk premia</b>	<b>0.24</b>	<b>0.40</b>	<b>0.56</b>
<b>Daily changes (bp)</b>	<b>-9</b>	<b>-1</b>	<b>3</b>



With a long-term perspective, it appears that the buy-and-hold risk premia on long-term Treasuries are quite high (see the right-hand side graph). This may not come as a surprise with some inflationary risks remaining and most days a strong positive correlation between the price of bonds and equities. Yet, since the beginning of Fed’s Quantitative Easing in 2010, there has been only two episodes where the buy-and-hold risk premia on 10-year US Treasuries have been significantly positive: the 2013 “taper tantrum” and the 2021 “reflation trade” episodes where investors introduced large short positions in Treasuries. Both time, these relatively high short positions and positive risk premia proved unsustainable and risk premia came back later on negative territory.

Looking forward, changing buy-and-hold risk premia should continue to introduce a lot of volatility in the US Treasuries markets. On the one hand, there is still an excess demand for long-term Treasuries and, we believe, a tendency for risk premia to go back on negative territory as soon as inflationary risks recede (and negative betas come back!). On the other hand, the market will have in the future to absorb a larger supply with the Fed starting to cut its holding of bonds (“Quantitative Tightening”). This may push many investors to introduce again large short positions in the belief that long-term rates are now on a structural upward trend.

## PART III : METHODOLOGICAL ANNEX

There is an abundant academic literature trying to extract from the yield curve the monetary policy path expected by investors and the risk premia embedded in the observed US Treasuries rates.

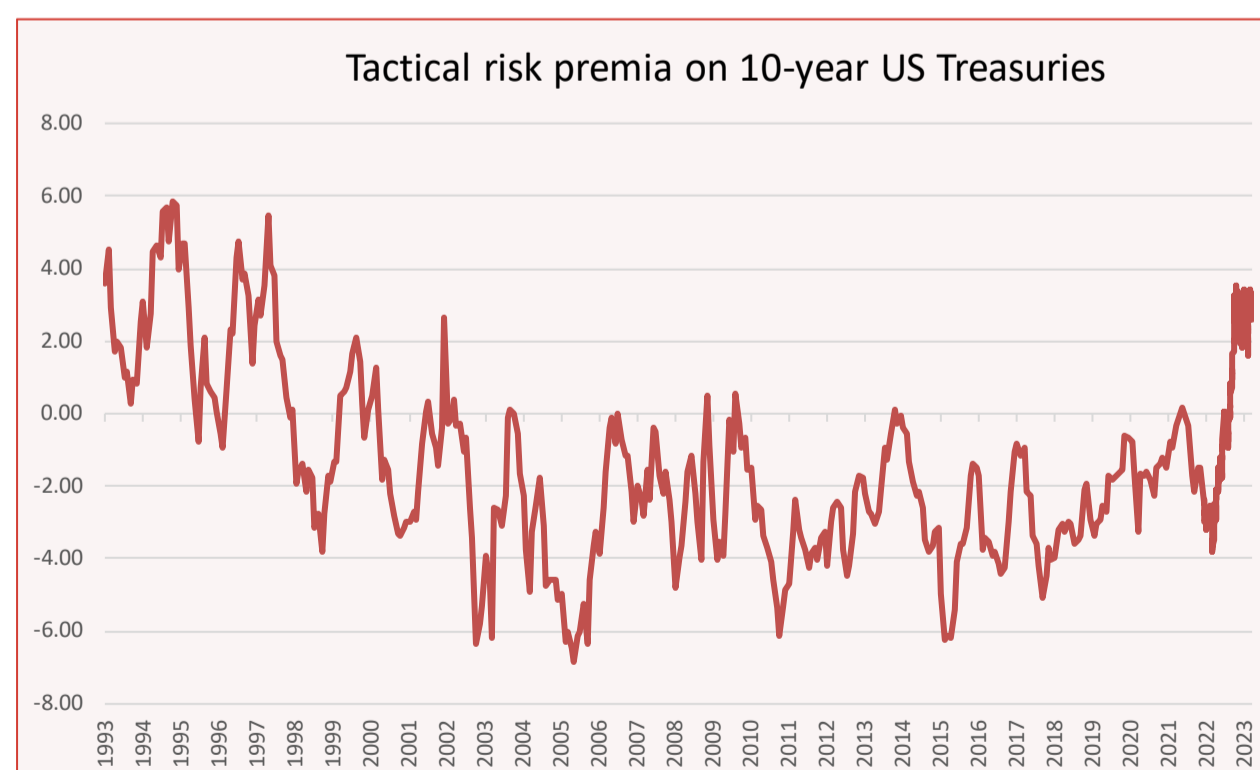
One of the best-known statistical models is the model developed by the Federal Reserve Bank of New-York. Their estimates are published daily on the NY Fed website (see [www.newyorkfed.org/research/data\\_indicators/term-premia-tabs#/overview](http://www.newyorkfed.org/research/data_indicators/term-premia-tabs#/overview)). Strangely enough, these estimates don't seem to be used by many markets practitioners when they discuss the shape of the yield curve and how it can be explained by short-rates expectations and risk premia. One of the reasons is that the results of the model are often quite unrealistic. To illustrate that observation, we can compare the average short rates expected by investors over the next 10 years according to this model with what professional forecasters expect (answers, once a year in February, to the well-regarded survey managed by the Federal Reserve Bank of Philadelphia. See [www.philadelphiafed.org/surveys-and-data/real-time-data-research/survey-of-professional-forecasters](http://www.philadelphiafed.org/surveys-and-data/real-time-data-research/survey-of-professional-forecasters)).



There are many reasons why the average investor's view priced into the market may differ somewhat from the answer given by professional forecasters, but the difference is often much too large to be realistic.

The truth is that the estimates published on the NY Fed website are rather imprecise. There is indeed a large academic literature stressing that the yield curve alone does not contain enough information to extract the investors' underlying views and that the results of surveys should be incorporated in the extraction process (see Kim, Don H., and Athanasios Orphanides, 2012, Term structure estimation with survey data on interest rate forecasts, *Journal of Financial and Quantitative Analysis* 47).

Our model belongs to this class of models that combine information coming from well-regarded surveys with the observed yield curve. But its key originality is elsewhere. Our model does not extract only the buy-and-hold risk premia, but it also extracts the important short-term tactical risk premia required by investors on bonds of various maturities. These tactical risk premia are very important to understand the shape of the yield curve (see the references at the end of this page). One very important result of our work is that until the recent inflationary fears these tactical risk premia have been on average negative since the end 90s (the following graph represents the annualized excess return expected by investors on 10-year Treasuries at the 3-month horizon).



That means that a long time before the Fed introduced QE there was already an insufficient supply of risk-free Treasuries: tactical positions were on average structurally short in this key market. To keep it simple, this rich information about tactical risk premia is not discussed in this daily comment, but an excel file with the full information is available on our website (see the link on the homepage of [www.riskpremium.com](http://www.riskpremium.com))

**To know more about our modelling of the yield curve, and the key insights it provides on how markets price risks:**

For a short presentation of the indicators we publish and how they can be used to understand the US yield curve, see <https://riskpremium.com/wp-content/uploads/2022/07/RiskPremia-UST-guide-en.pdf>

For a non-academic description of our modelling, see <https://riskpremium.com/wp-content/uploads/2022/06/USTreasuries-Model-Guide.pdf>