



# How much risk-taking is required to beat inflation?

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- For wealthier investors, capital preservation often outweighs the pursuit of greater riches, particularly in volatile economic climates.
- Years of expansionary monetary policy post-Great Financial Crisis led to low or negative interest rates, posing a challenge for preserving wealth.
- Despite the recent return of significant interest rates, concerns over their persistence and inflation complicate the investment landscape, affecting strategies for wealth preservation.
- Achieving real wealth preservation is possible and does not require aggressive risk-taking but can be achieved with a fairly defensive combination of close-to risk-free investments with riskier assets.

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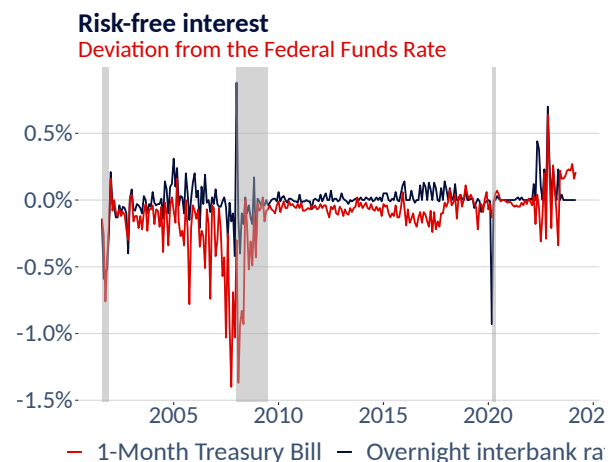
**T**he Reddit crowd may be attracted by moonshot bets, but for wealthier investors, preserving capital is frequently a more important concern than the accumulation of even greater riches. For years, the highly expansionary monetary policy following the Great Financial Crisis reflected in low or negative interest rates turned this task into a challenge. Today, investors are cheering for the return of significant interest rates, but a jump in inflation is blurring the picture.

## 1 The goal of capital preservation

"If you want to eat well, buy stocks; if you want to sleep well, buy bonds", goes an old saying by legendary stock market guru André Kostolany. The sentence summarizes the basic risk-return profile of both asset classes quite well, but as inflation hit the double digits in 2023, many bond investors probably slept all but well. In other words, bonds and other fixed-income instruments like fiduciary deposits may be less prone to exposing investors to principal losses, but in order to preserve wealth, it is insufficient to protect a portfolio's nominal value. Real preservation of wealth means the preservation of an estate's purchase power and, hence, the generation of gains that outpace inflation. We have, therefore, asked ourselves if it is possible to achieve this goal with (virtually) risk-free investments only and, if not, how much exposure to riskier assets an investor needs to take at least to achieve this goal.

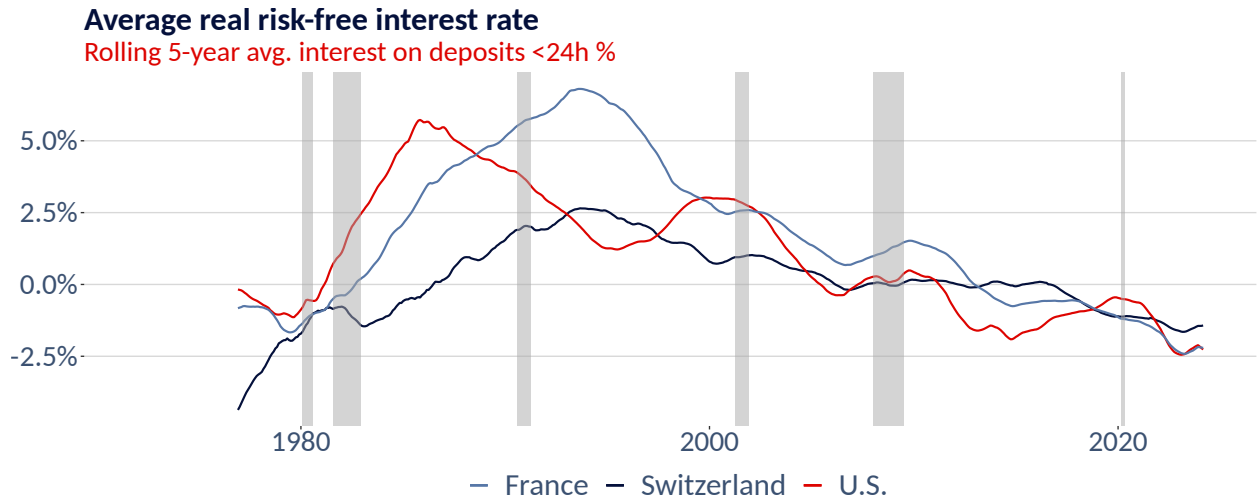
A good starting point in this context is the level of real, which means inflation-adjusted, risk-free interest offered by an economy. This is usually determined by

the monetary policy of the responsible central banks, which defines at which interest rate banks can borrow from or make deposits with the central bank overnight. As most financial market actors don't enjoy having a bank account with the ECB or SNB, the closest proxy for a risk-free investment is typically a very short-term government bond or a short-term deposit with a bank. The latter can vary slightly from bank to bank and is, therefore, not readily observable. Still, we see that the interbank interest rate (the rate at which banks lend to each other) in the U.S., for instance, as well as the rate offered by short-term Treasuries, closely follow the



Source: *FRED, Amadeus Capital*

**Figure 1:** During normal times, interbank rates and the interest offered by short-term government bonds are closely determined by central bank's monetary policy.



Source: FRED, Amadeus Capital

**Figure 2:** Inflation-adjusted risk-free interest rates have been on a downward trend since the 1980s. Even longer time series show that real short-term interest rates were generally positive before the Second World War. After dipping into negative territory during the war, they recovered in the 1950s and 1960s before turning sharply negative for a short period in the 1970s. The 1980s and 1990s were again characterized by clearly positive risk-free interest rates, which ended with the bursting of the Doctom bubble and the great financial crisis. The situation was more difficult for savers in Switzerland, where real interest rates were significantly lower for most of the 20th century.

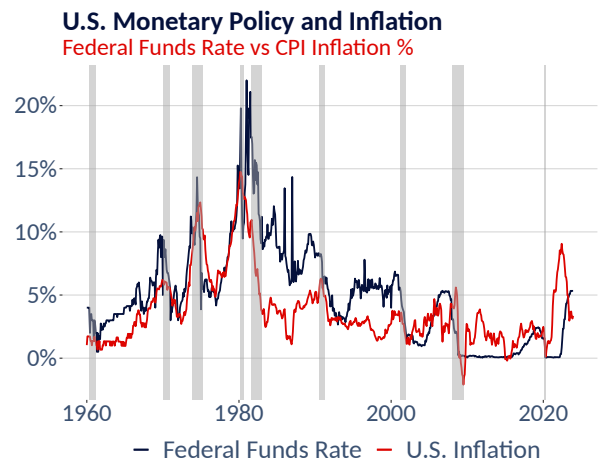
interest rate set by the central bank. As Figure 1 shows, there can be deviations during times of financial distress as not all deposits are insured (see Silicon Valley Bank), and even 1-month Treasury Bills have a bit of duration. Nevertheless, we consider both variables a good enough proxy for the risk-free interest rate.

## 2 A short history of real interest rates

Figure 2 looks at the development of the real interest rates in Switzerland, the U.S. and the Eurozone (using France as an example) over the past decades by deducting the headline CPI (Consumer Price Index) inflation rate from the interbank rate.

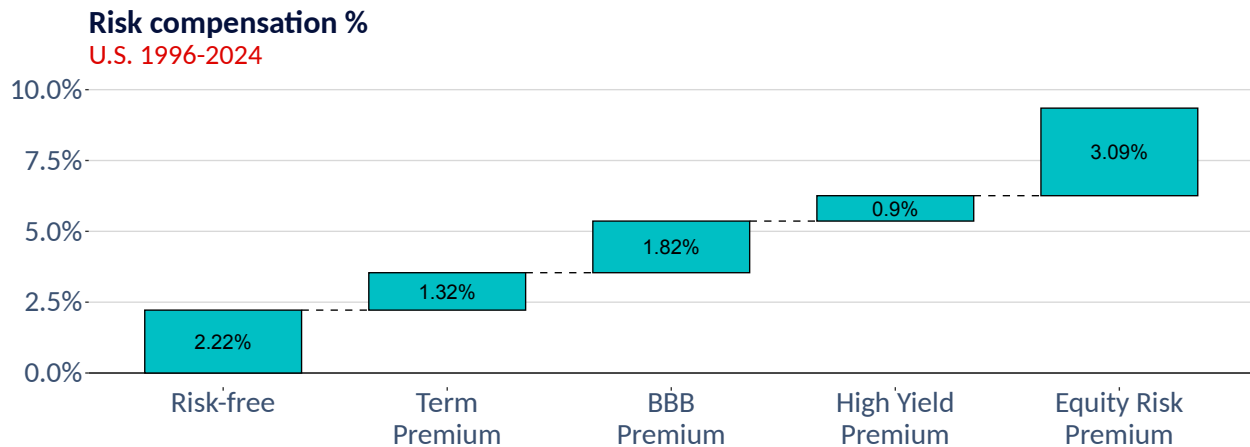
This variable can be quite volatile, so we calculated a moving 5-year average. What we observe is not surprising. Following a period of relatively benign inflation and positive real rates in the 60s, real interest rates turned negative for most of the 70s, when the first inflationary wave hit relatively low rates. They reached extraordinarily high levels during the 80s when central banks took up the fight against inflation, raising rates to levels as high as over 22% in the case of the United States as shown in Figure 3. When inflation normalized following the inflationary period of the 1970s and 1980s, interest rates followed with a significant lag, resulting in record high real rates during the mid- to late 1980s. For example, the Federal Funds Rate (the rate set by the Federal Reserve Bank in the U.S.) was still above 10% when inflation had dropped to under 5%. For unambitious or risk-averse prioritizing capital preservation, the mid to late 80s were thus a golden time. The early 90s marked another surge in inflation,

resulting in real interest rate briefly touching zero in the U.S. and Switzerland, before central banks reacted. Consequently, real interest rates stayed decisively positive throughout most of the 90s until the burst of the Dotcom bubble. In other words, positive risk-free interest rates were the norm during the post-war period rather than the exception in the U.S., Switzerland, and France. We find that, on average, short-term risk-free investments, as proxied by the interbank rate in this case, offered a return after inflation of 3.3% in the U.S., 4.1% in France and 1.1% in Switzerland. Obviously, this does not yet include any fees, expenses or



Source: Source: FRED, Amadeus Capital

**Figure 3:** Inflation fell sharply in the early 1980s, but the central banks, above all the Fed under Paul A. Volcker, feared the risk of a renewed acceleration in consumer price momentum and kept interest rates high throughout the decade.



Source: FRED, Amadeus Capital

Figure 4: Investors can choose between a range of instruments to achieve additional returns, which differ mainly in terms of their duration and the predictability of cash flows.

taxes, most notably the Swiss wealth tax. Nevertheless, we can see that apart from the the 1970s, before the turn of the century investors could do relatively well leaving their money in the bank. The fact that inflation-adjusted interest rates were low in Switzerland by international comparison following World War I is known under the term "Swiss Interest Rate Island" and has been well documented and studied.

The Swiss Ministry of Education, for instance, published an [informative paper on the topic in 2021, analysing real rate trends over almost 150 years](#).<sup>[3]</sup> Various studies have identified different causes for the phenomenon, including a negative risk premium attributable to the country's exceptional economic, political and legal stability. Interestingly, the Swiss interest rate island seems to have disappeared since the turn of the century. While nominal rates in Switzerland were exceptionally low over the past 20 years, deflationary dynamics in the country meant that real interest rates were actually in-line with those observed in the U.S. or the Eurozone.

Both in the U.S. and in Switzerland, real rates on short-term risk-free instruments turned negative between 2002 and 2005 and only reached positive territory very briefly right before the Great Financial Crisis of 2008. As we know, the financial crisis famously heralded the era of negative interest rates and quantitative easing, resulting in real rates hitting decisively negative rates for an extended period and hitting a multi-decade low of -8% in the U.S. after the Covid pandemic.

Consequently, the average risk-free real interest rate since the Dotcom bubble was -0.37% in Switzerland, -0.81% in the U.S. and -0.20% in France. As outlined, the situation worsened during the financial crisis, and since the beginning of the first round of Quantitative Easing in the U.S., the risk-free rate was -0.75% in Switzerland, -1.5% in the U.S. and -1.15% in France

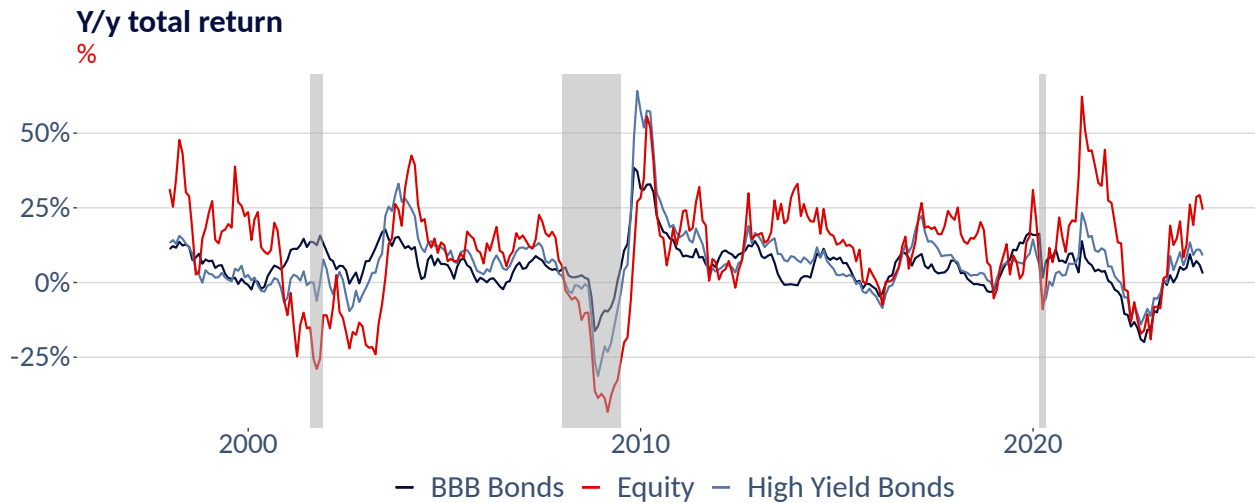
on average. This may not sound like a lot, but even a 1% decline in real wealth p.a. translates into a 10% loss over a decade, before taxes and expenses.

Optimists may now argue that the central bank's fight against inflation has since resulted in a rebound in rates and, for the first time since the Great Financial Crisis, pushed inflation-adjusted short-term interest rates above zero, at least outside of Switzerland. The crucial question is whether this return to positive real rates marks a longer-term regime shift or whether driven by secular factors like demographics and government indebtedness we will return to the pre-Covid new normal.

### 3 How much can be earned where?

For those investors keen on preserving their wealth also in the second scenario and for the Swiss investors, who after the latest decision of the SNB seem to find themselves on an interest rate island once again, we delve into the return premium offered by risky assets. For this, Figure 4 takes a closer look at U.S. data, beginning with the term-premium, which in this example is defined as the difference between the risk-free short-term interest rate and the interest paid by 10-year government bonds. While government bonds are safe investments in the sense that their timely repayment should be guaranteed, their long duration, nevertheless, translates into substantial volatility.

As the poor performance of many fixed-income strategies demonstrated in 2022, temporary losses in these instruments can be significant and, as Silicon Valley Bank showed, even deadly for investors who can't hold the asset to maturity. Over the past 28 years, in the U.S., the average compensation for this duration risk was 1.32%. Investors looking for even higher returns



Source: FRED, Amadeus Capital

Figure 5

will naturally look into corporate bonds, which come with credit risk, meaning the risk that the issuer will fail to pay interest and principal fully.

Nevertheless, we find that the realized total return of BBB bonds, as indicated by the ICE Bofa BBB Index, was practically identical to the average level of interest offered. BBB Bonds are still relatively safe, and default rates have been minimal. Default rates are significantly higher in the High Yield segment, which, as compensation, promises another pick-up in yield. To properly account for defaults, we derived the high yield premium by comparing the compound annualized return of the ICE Bofa High Yield Index with those realized by the BBB Index. It is noteworthy in this context that due to the high yield's greater volatility, these results become more sensitive to the start and end-point of the analysis. The return premium estimated this way may look overly large when an investor analyses a period that starts during a crisis when high-yield trades at depressed levels and vice versa.

The same applies to the equity risk premium, which is probably the most elusive and hence hardest-to-estimate figure in this context. In a 2016 blog post, the St Louis Fed estimated it for the U.S. as the difference between the annual returns of the ICE Bofa BBB Index and the Willshire 5000 Total Market Index. [1] In our slightly more granular Figure 4, we are looking at the premium earned relative to the high yield index, which by definition should be a bit smaller and consider the difference between the annualized compound return, as the equity risk premium. Obviously, the longer the estimation period, the more stable this estimate is. For the 28 years since 1996, we find an equity premium of 3.1% vs High Yield, 4% vs BBB Corporate Bonds and over 5% vs 10-year government bonds. The latter seems to be on the higher end. Schroders, for instance, finds that between 1871 and 2023 (125 years), equities outperformed government bonds by about 4.5%

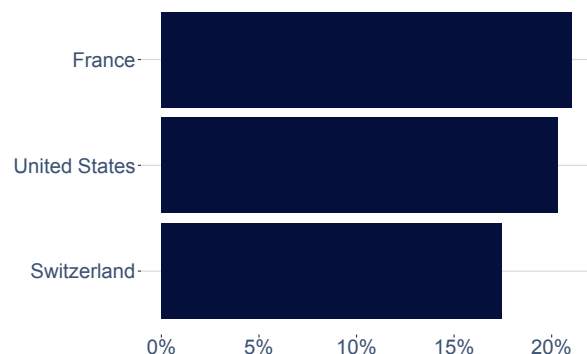
per year. Still, depending on the length of the analysis period, this estimate fluctuates between slightly over 2% and almost 7%.[2] Given the shortcomings of the historical, backward-looking approach to estimating the equity risk premium, it is often supplemented by other measures, such as an estimate of what the markets are currently pricing in for the future. We recently discussed this topic in more detail in our Q1 2024 Capital Market Assumptions.

#### 4 Risk taking exemplified by a barbell strategy

As we demonstrated earlier, at least over the past two decades, investors seeking to protect their wealth had to take risks to beat inflation. Setting aside complex

##### Required equity quota post 2008

10-year government bonds + equity barbell strategy



Source: Source: FRED, Amadeus Capital

Figure 6: We are solving for the required equity quota to maintain the portfolio's purchasing power, assuming the average real interest rate offered on local currency 10-year government bonds and a 4.5% equity risk premium and 1.5% in costs and taxes per year.

strategies like hedge funds or leveraged investments like private equity, they can move from virtually risk-free short-term fixed-income investments to pure equity risk with a range of instruments sitting in between. Some of them are more similar to risk-free assets like long-duration government or investment-grade bonds, while others behave more like stocks, like high-yield bonds. In Figure 6, we assumed a simple barbell strategy that invests exclusively in 10-year government bonds with the observed real interest generated over the observed time and equities, assuming an equity risk premium of 4.5%. We further assume 1% in taxes and expenses. An investor seeking inflation protection over this time would have achieved the goal of real wealth preservation by choosing an equity quota between 17.4% in Switzerland, 20% in the U.S. and 21% in France. The estimate increases to 28.5% for Switzerland, 31% for the U.S. and 32% for France if we assume taxes and expenses of 1.5%.

Of course, the strategy presented is highly simplified. In practice, it makes sense to take a more granular and diversified approach, including other assets like corporate bonds, real estate, and precious metals, to optimize the portfolio's risk-return profile. Nevertheless, these figures give us an idea of the kind of allocation roughly required for the goal of capital preservation, and interestingly, they correspond roughly to the equity risk taken by a typical defensive wealth management solution. In other words, those who primarily want to sleep well should probably buy some stocks, too, but the amount of risk-taking required to beat inflation is fairly limited.

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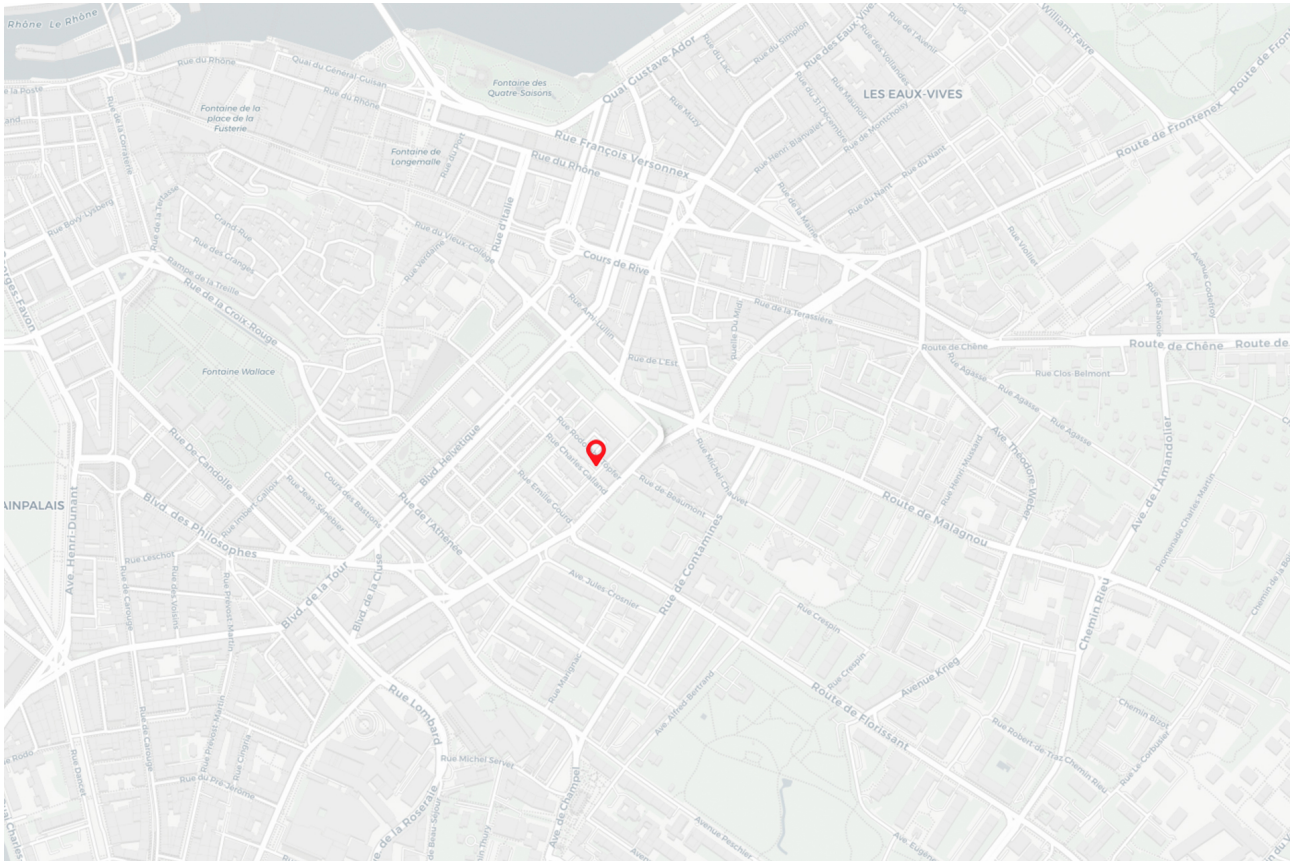
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