

Julius Bär

Editorial

Dear reader,

As we finally settle into 2023, our wish is simple: farewell 2022 – and never come back! Given that 2022 was characterised by a hot war in Europe, inflation back with a vengeance and triggering the worst bond market rout on record, and the onset of an equity bear market, there is no need to elaborate on why this is our wish.

After 40 years of attrition and incursion into negative territory, a rise in interest rates was universally expected, but the speed and violence of the retracement surprised even the most seasoned investor. We must concede that these exceptional market circumstances led to a failure of risk management: in 2022, portfolio performance was not proportional to risk but was instead unanimously down and by a similar magnitude. Indeed, when low-risk bonds lose as much as riskier equities, all portfolios are hit in the same way.

However, as we foresee no recession at this stage, there is good news: the resulting declines in market value have mechanically increased risk premiums, and higher interest rates have pushed yield above inflation. So now is the time to position your

portfolio for 2023, i.e. close to your Strategic Asset Allocation (SAA), which is exactly what the Julius Baer Investment Committee did for its Tactical Asset Allocation a couple of weeks before year-end 2022.

Do not look back at the losses from 2022, but rather go 'neutral' to avoid missing coupons, dividends, and capital gains. As we show in this publication, expected returns for 2023 are 1.4% to 3.3% higher than last year, depending on your base currency and risk profile. We are now expecting return levels ranging from 3% to 7%. As most portfolios were down 10% to 15% over 2022, this means that losses should be offset in two-to-three years. It may seem like a long time, but investing is more about patience than opportunism. So let us remind you of some important advice regarding portfolio management: do not look at the performance of your portfolio too often, since it makes you more risk-averse. This is especially true for riskier profiles, which have a higher probability of loss over the short run - but also a higher expected return over the long run. Ideally, stick to your risk profile, choose your portfolio manager wisely, and only look at performance at year end.

Yours sincerely,



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Contents

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Editorial

5
Inflation: Like the phoenix rising from the ashes

7
Inflation: A dire companion for the next ten years?

9
Capital market assumptions in an era of inflation

12
Updating our Strategic Asset Allocation

15
Important legal information
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Inflation: Like the phoenix rising from the ashes

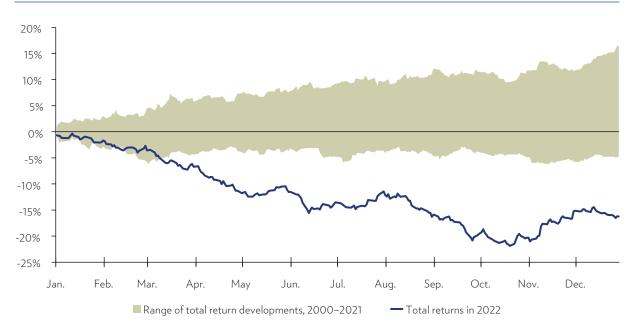
The unprecedented surge in inflation in 2022, due to a combination of various economic and political factors, led to the worst bond market rout in history and sent equities significantly lower, with the MSCI World index down by 18% last year.

The surprise of 2022 – here to stay?

The colossal surge in inflation witnessed in 2022 has been unprecedented since the 1980s and is the result of a combination of factors. To dampen the negative economic effects of the Covid-19 pandemic, the US and several other countries overcompensated households for income losses via stimulus payments. This, combined with the fact that central banks had been flooding the economy with zero-cost liquidity for years, created massive

pent-up demand at a time when corporations world-wide had reduced production because of the pandemic. In addition, the costs for energy and food (both ubiquitous production inputs) were sent into a vertical climb by the war in Ukraine, thereby creating a perfect storm.

Chart 1: The worst fixed income market rout on record



Source: Bloomberg Finance L.P., Julius Baer

Note: Data as at 31.12.2022. The data shown in this chart is based on the Bloomberg Global Aggregate Bond Index, which is a flagship measure of global investment-grade debt from 24 local-currency markets. This multi-currency benchmark includes Treasury, government-related, corporate, and securitised fixed-rate bonds from both developed and emerging market issuers. Past performance and performance forecasts are not reliable indicators of future results. The return may increase or decrease as a result of currency fluctuations.

Fixed income as a major casualty

The return of inflation triggered the worst rout in fixed income markets on record. While this day of reckoning had been expected for years, if not decades, the magnitude and, most of all, the tempo of the adjustment stunned even the most experienced creditors. Whether government, high-investment-grade, or high-yield bonds, all market segments were hit. The longer the maturity, the harder the segment was hit.

This indiscriminately adverse bond market caused a rare malfunction of investment risk management, as low-risk profiles lost almost as much as high-risk profiles. Indeed, the 'all-weather' resilience of high-grade bonds failed us when we needed it the most.

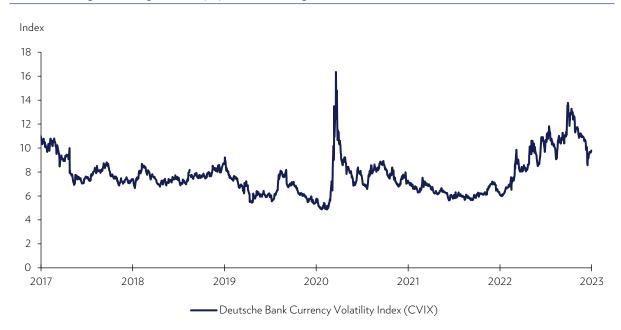
That being said, there was almost nowhere to hide in financial markets over the year, except maybe in commodities. But should they honestly be chosen for a strategic asset allocation given that they provide no 'positive drift', i.e. no coupon, dividend, or positive expected return over the long run?

Spike in foreign-exchange volatility

Inflation also quickly spread internationally through exchanges rates, another 'forgotten' risk of the last few years. Foreign-exchange volatility experienced a revival in 2022 after five very tame years (the onset of Covid-19 in 2020 aside), as seen in chart 2.

This environment complicates matters for our return forecasts, even if we use government bond yields as the basis, which, in theory, encompass investors' inflation expectations. Moreover, for the management of your wealth, high foreign-exchange risk adds another source of volatility – even if it can sometimes be favourable for diversification purposes.

Chart 2: Foreign-exchange volatility spiked due to higher inflation



Source: Bloomberg Finance L.P., Julius Baer

Note: Data as at 31.12.2022. The Deutsche Bank Currency Volatility Index (CVIX) measures the implied volatility of currency markets, so it is a measure of the market's expectation of future currency volatility.

Inflation: A dire companion for the next ten years?

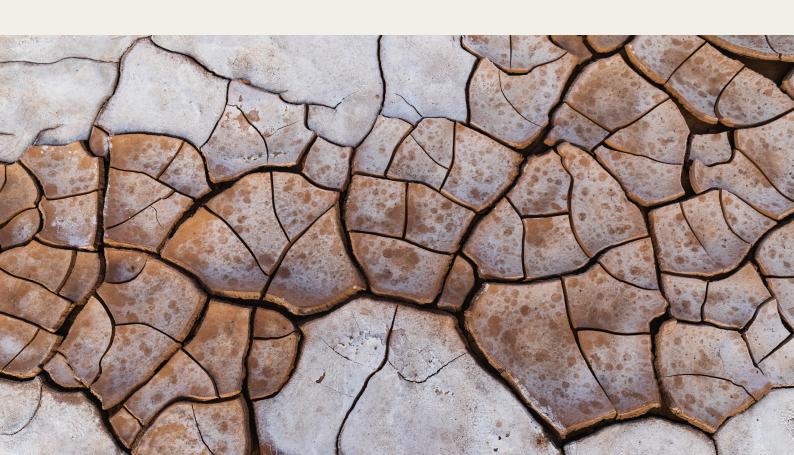
Inflation is back with a vengeance, but for how long? Central banks, armed with legions of economists, have confessed their inability to forecast inflation over a quarter, so any ten-year forecasts are highly uncertain. Therefore, let us review instead the most significant trends and their impact.

Accommodative monetary policy fuelled financial capital

In an attempt to revive economies through monetary policy after the dot com bubble burst in 2001 and once again after the Global Financial Crisis in 2007/2008, central banks implemented financial repression with zero or negative rates. Twenty years of artificially low cost of capital led to overinvestments in the financial sphere and inflation in asset prices. Why is that? Low interest rates increase the current value of future cash flows, so that financial operations (e.g. dividends, share buy-backs, and

mergers and acquisitions) become more interesting than physical investments. This is because they increase the return on equity (RoE) above the expected return of tangible-asset, capital-expenditure (capex) investments. This trend is revealed by Tobin's Q, the ratio of equity value to the replacement value of real assets, which has increased from 80% to 130% over the last 20 years.

¹ D.J. Elliott (2022). 'Finance in 2022: Five key policy issues'. OliverWyman report.



Since China's accession to the World Trade Organization in 2001, many companies have offshored their capex investments to China, thereby investing massively in the 'factory of the world' and moving millions of workers from fields to factories. Economies of scale, low wages, and increasing productivity provided our economies with lower-priced manufactured goods. Germany, the world's industrial powerhouse, thrived on China's demand for industrial goods, a cheap euro, and abundant Russian gas. These two engines, combined with stable demand and stagnant wages, stifled overall inflation.

Forget about cheap energy and China as global deflators

The war in Ukraine demystified our ability to seamlessly transition to decarbonised energy with a brutal truth: fossil fuels provide over two thirds of the world's energy.² Oil and gas prices have skyrocketed and are unlikely to provide deflation in the current geopolitical context, at least in the short-to-medium term. As for China, it is no longer the world's deflator: reshoring, the Covid-19 pandemic, followed by the zero-Covid-19 policy and common prosperity policy, have halted this process.

Will central banks be able to put the genie back in the bottle?

Several central banks had a knee-jerk policy response to inflation surging multiple times above their 2% target when they raised interest rates much faster than expected. But after 30 years of low inflation, no central banker in the developed world has actual experience in taming inflation.³ Forward guidance has also lost credibility, to say the least. Some central bankers have admitted that their forecasts are very inaccurate, and in Australia an independent external review has even been set up to look into this matter. Compounding these issues is the post-pandemic, historically high level of government debts. So will central banks have enough independence to turn debt services into major government expenditures? In the absence of any recession, the danger of unanchoring inflation expectations is clear, and the repercussions could be felt beyond our estimated period of ten years.

² International Energy Agency (2002). Energy Statistics Data Browser, www.iea.org, accessed February 2023.

³ P. Blanqué (2022). 'The embarrassing legacy of financial capitalism: Implications for investors'. Discussion paper #54 of the Amundi Institute.

Capital market assumptions in an era of inflation

Our capital market assumptions are the risks and returns that we expect over the next ten years for all asset and sub-asset classes of our wealth management mandates.

We define the capital market assumptions (CMAs) annually based on intense preparations and discussions among our senior portfolio managers, analysts, and risk managers. These CMAs play a significant role, since we use them throughout the year to illustrate and compare the expected risks and returns of our standard and bespoke mandates.

To craft estimates, we could use a fully fledged global econometric model, but that might add further uncertainty, especially in the current environment of high, but hopefully pivoting, inflation. To mitigate this issue, we use the observable yield of government bonds (i.e. the 'risk-free' rate) as our

base layer and then add on an appropriate risk premium for each asset class in a layered approach.

With regard to the risk-free rate, we have witnessed an unprecedented yield rise since last year: the yield of 5-year US Treasury bonds has increased from about 1% to 4%, causing a debacle on bond markets worldwide. In the US, we expect the federal funds target rate to peak around 4.5% in 2023 and revert to 3.5% in ten years. We also expect a normalisation of the slope of the US yield curve towards its long-term average of 1%, which we translate into an increase of 0.5% in 10-year US Treasury yields in ten years.



In Europe, we likewise expect a normalisation of yield-curve slopes, i.e. we expect upward shifts of 0.5% and 1%, respectively, for 5-year and 10-year maturities for both the EUR and CHF yield curves. Towering inflation has dragged the Bank of England's base rate much above the rest of the continent, so for the GBP we expect short-term rates to decline by 1%, while the 10-year-maturity government bond yield should climb by 1%. Contrary to the forward curve (i.e. implied interest rates ten years from now), we expect normal, upward-sloping – rather than flat – curves.

With regard to cash (or money markets), our expected return is directly derived from government bonds, using the short end of their curves as the basis.

For corporate bonds, we add a risk premium to the expected risk-free rate on each bond segment (investment grade, high yield, emerging market), which is computed by the following formula:

Risk premium = average spread

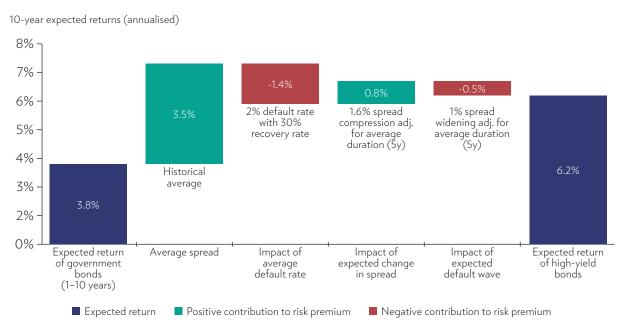
- default rate × (1 recovery rate)
- ± change in spread × duration
- default wave impact

As chart 3 illustrates using the example of USD quality high-yield bonds, the expected risk premium is the sum of the average historical credit spread (3.5%) minus the impact of the average default rate (-1.4%) plus the impact of expected spread compression (0.8%) minus the impact of an expected default wave (-0.5%).

At the beginning of last year, the pandemic had led to a widening of credit spreads, which provided a tailwind to our expected ten-year returns due to the resulting expected spread compression over the subsequent ten years. This year, we still have above-average spreads, but of a smaller magnitude, so the tailwind is also smaller.

However, this year we have added a wave of defaults into our calculations. Historically, defaults tend

Chart 3: An example of how we calculate expected returns – quality high-yield bonds in USD



Source: Julius Baer

Note: The figures presented in this chart are rounded. The reference level is based on the yields as at 30.09.2022. Past performance and performance forecasts are not reliable indicators of future results. The return may increase or decrease as a result of currency fluctuations.

to come in waves (1990, 2000, 2008). We can reasonably expect one wave over the next ten years, as interest rates have increased sharply, corporate yield spreads have widened, and Covid-19-related government support must be paid back. In our analysis, the likelihood of default by zombie companies (i.e. companies surviving only thanks to cheap borrowing), but also many other companies, has increased significantly. To model a wave of defaults, we analysed past instances and determined that the impact of a wave can be approximated by an average two-notch rating downgrade. To incorporate this impact in our calculation, we multiplied the spread widening that results from such a rating downgrade by the average duration of the reference index.

For equities, we have enriched our approach by looking at several valuation metrics, including:

- a comparison of the long-term performance of equities vs gross domestic product
- an analysis of historical price-to-earnings ratios (P/E) across the world
- an examination of the Shiller cyclically adjusted P/E for several markets
- Grinold & Kroner's four-factor market-valuation model

We have also compiled a host of long-term market-performance statistics for several countries,

starting around 1900 – and even 1890 for the US. This multifaceted approach provides a wider variety of perspectives but also generates more variations in expected risk premiums. Overall, since simple equity risk premiums (earnings yield minus government bond yields) are stable, with higher interest rates making up for lower P/Es, we have kept the equity risk premium at its average long-term value of 4%.

Real estate investment trusts (REITs) are unchanged at a 3.5% annualised risk premium over the next ten years. For Swiss real estate funds, however, we increased the risk premium by 0.3% to 2.3% after the market downturn pushed dividend yields higher and agios lower. For alternative investments (i.e. hedge funds in our portfolios), we have left the risk premium at its historical average of 1.5%, which is commensurate with corporate and high-yield bonds, as the volatility of these asset classes is comparable.

We have also made no changes regarding gold, an asset that provides insurance value in times of crisis, since we consider it to be fairly priced in the absence of systemic risk. Thus, we calculate a zero risk premium for gold over government bonds.

Finally, and as usual, private equity exhibits the highest expected return, 2.5% above equities, which is in turn 6.5% above government bonds.



Updating our Strategic Asset Allocation

Every year, we carry out a comprehensive analysis to determine whether the current and expected market developments warrant a change in our SAA.

Based on our analyses, no change in composition is warranted with regard to our SAA this year. However, as already outlined, expected returns are now much higher due to higher government bond yields in all four of our base currencies. At the level of our SAAs, we have witnessed expected return increases between 1.4% (CHF Growth) and 3.3% (GBP Income). Our detailed, updated list of expected risks and returns over the next ten years, by investor risk

profile and reference currency, can be found in table 1.

Updated SAA expected returns

In chart 4, we have added in the important dimension of risk – a bit naively measured by volatility only – to our expected returns in USD. Plotting our asset classes, which range from money markets to private equity, illustrates the wide range of risk that is

Table 1: Strategic Asset Allocation 2023 by risk profile

Asset class	Income	Balanced	Growth
Money market	5%	5%	5%
Money market (local)	5%	5%	5%
Fixed Income	60%	40%	20%
Government bonds (local)	20%	10%	10%
Corporate bonds (local)	25%	15%	0%
High-yield bonds (global)	7.5%	7.5%	5.0%
Emerging markets corporate bonds	7.5%	7.5%	5.0%
Equity	30%	50%	70%
Global equities	15%	25%	35%
Domestic equities	9%	15%	21%
Asian equities, excluding Japan	3%	5%	7%
REITs/real estate funds (local)	3%	5%	7%
Alternatives	5%	5%	5%
Hedge funds	5%	5%	5%
Expected return USD	5.7%	6.4%	6.9%
Expected risk USD	6.3%	9.0%	11.4%
Expected return EUR	4.3%	5.0%	5.5%
Expected risk EUR	5.8%	8.4%	10.7%
Expected return CHF	3.0%	3.7%	4.2%
Expected risk CHF	5.3%	7.5%	9.6%
Expected return GBP	6.0%	6.6%	7.2%
Expected risk GBP	5.7%	7.9%	9.9%

Source: Julius Baer

Note: REITs = real estate investment trusts. The reference level is based on the yields as at 30.09.2022. Past performance and performance forecasts are not reliable indicators of future results. The return may increase or decrease as a result of currency fluctuations.

available to investors. Higher interest rates push our expected returns above the level of inflation, providing an escape from financial repression. Two clusters are evident: fixed income and equities. The art of portfolio construction resides in optimally combining these two clusters into useful portfolios.

Investors must keep in mind the wide confidence interval (i.e. a range of values that describes the uncertainty surrounding an estimate) prevailing around our expected returns, which are less stable than volatility. While over the very long run, greater confidence can apply, any major financial crisis or paradigm shift over the next ten years can mean a roller-coaster ride for returns. That being said, chart 4 indicates our preferences for our three risk profiles (Income, Balanced, and Growth).

Gold clearly has an inferior risk-return profile to fixed income, which offers lower volatility and a higher return. For the rest, we can note that harvesting the highest return requires a solid dose of risk, but if your time horizon is long enough, it may be worth taking those risks to protect your assets from inflation.

With a moderate risk appetite, what return can I expect?

As noted, one must be cautious about return expectations. We translate this caution into confidence intervals when we aggregate expected returns for our three risk profiles.

Our confidence intervals are based on the properties of compounded returns and volatility over time and help you to visualise the best and worst cases at a certain probability level. Our expectations for USD and EUR profiles are shown in chart 5. They reveal that the lowest expected return in USD (at the 5th percentile) is above 3% per annum for all risk profiles, while in EUR, it is only slightly above 1.5% (in CHF, it is barely positive). As already mentioned, these numbers are much higher than last year, which should assuage investors after a painful 2022.

We observe a 25% probability that ten-year returns will surpass 6.5% per annum for the low-risk Income profile in USD and 5% in EUR. By adding risk, i.e. moving to the Growth profile, investors can elevate their upside potential to 8%, but at the cost of higher volatility.

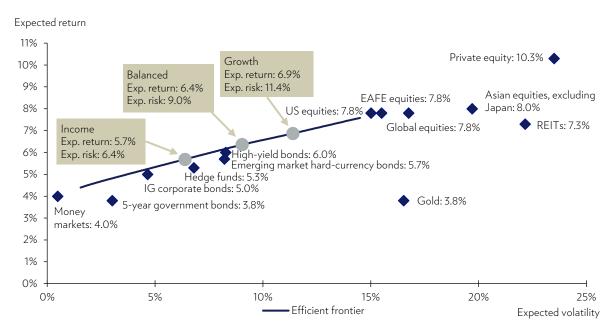


Chart 4: Annualised ten-year expected risks and returns per asset class and risk profile (in USD)

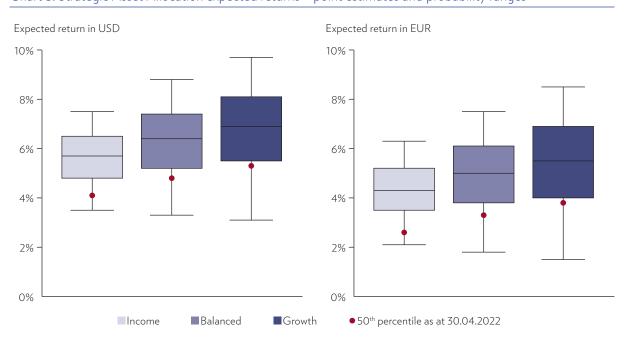
Source: Julius Baer

Note: EAFE = Europe, Australasia, Far East. REITs = real estate investment trusts. Exp. = expected. IG = investment grade. The reference level is based on the yields as at 30.09.2022. Past performance and performance forecasts are not reliable indicators of future results. The return may increase or decrease as a result of currency fluctuations.

While our expected returns are comfortably higher than last year, many known and unknown 'unknowns' remain along the route to your investment goals. Now, more than ever, flying with an experienced captain is key to ensuring a safe flight in which unexpected clouds with potentially severe consequences can be avoided. Similarly, to steer clear of adverse investment weather or to circumnavigate financial tempests, you can trust that our Investment Committee, research analysts, portfolio managers, and risk managers will scrutinise the horizon and pilot the safest route forward.

How did we come up with the expected returns of our SAA? They are based on the asset-class-level returns. To find out more about these and to obtain further information on our new SAA, please consult our 'Capital Market Assumptions 2023' or contact your relationship manager.

Chart 5: Strategic Asset Allocation expected returns - point estimates and probability ranges



Source: Julius Baer

Note: In this box-plot representation, the bottom, middle, and top of the boxes show the 25th, 50th, and 75th percentiles, respectively, of the distribution. The bottom whisker shows the 5th percentile of the distribution, and the top whisker shows the 95th percentile. The reference level is based on the yields as at 30.09.2022. Past performance and performance forecasts are not reliable indicators of future results. The return may increase or decrease as a result of currency fluctuations.

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