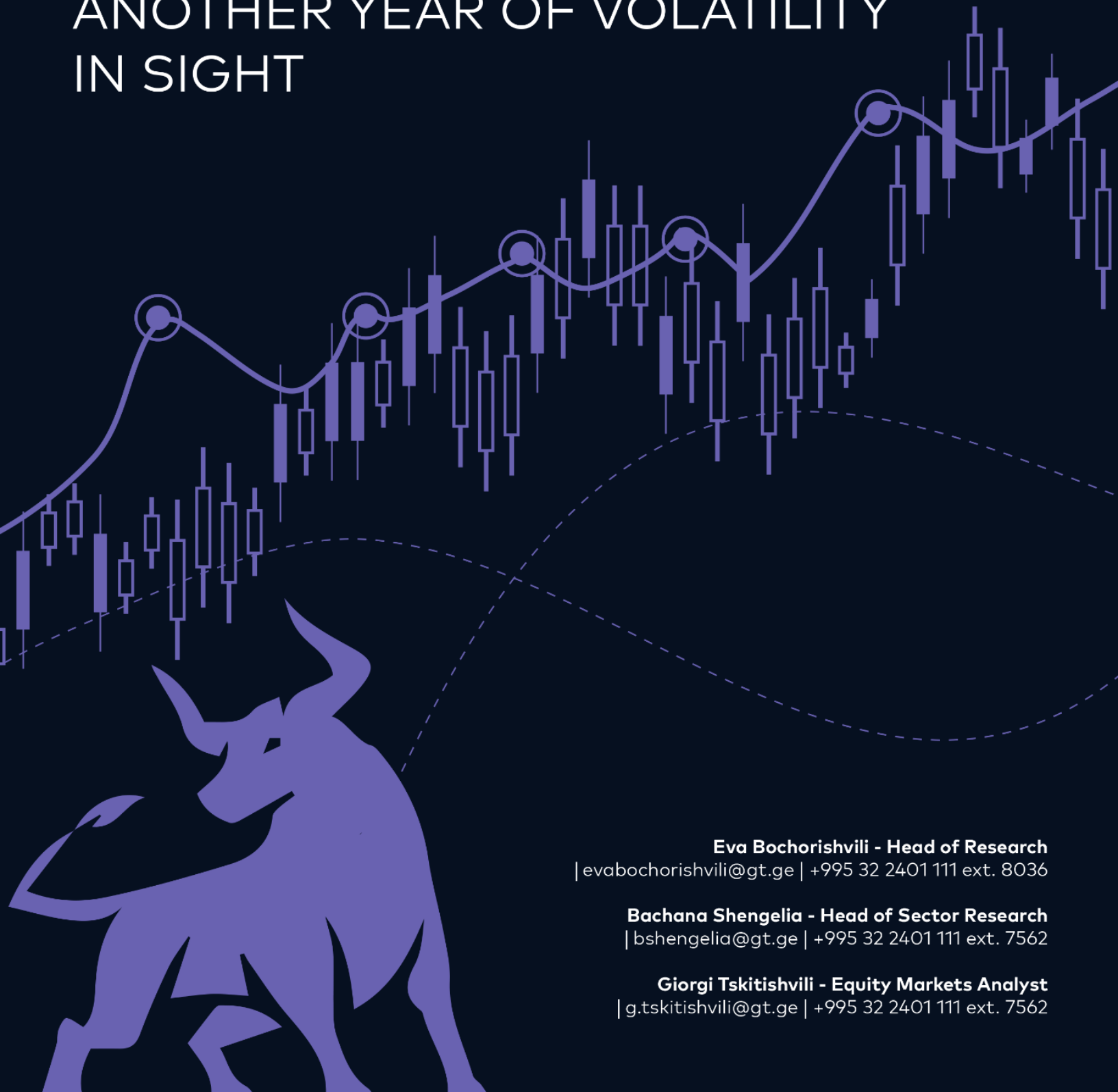




GALT & TAGGART
CREATING OPPORTUNITIES

2023 INVESTMENT OUTLOOK: ANOTHER YEAR OF VOLATILITY IN SIGHT



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1. Executive Summary: Another Year of Volatility in Sight

2022 has presented many headwinds for investors. The post-pandemic world is facing Russia-Ukraine war, China's economic freeze, and disrupted global supply chains which fuel inflation to historically high levels and diminish the prospects of economic growth. These developments coupled with the aggressive monetary tightening observed in most major economies has led capital markets to struggle, with both equities and fixed income experiencing sizeable losses.

Despite overall positive forecasts for financial markets, 2023 is expected to be full of volatility, as fundamental challenges from 2022 are yet to be resolved. To help investors maneuver effectively during the times of such turmoil, we have aggregated the core research insights on 2023 capital markets outlook from some of the top international investment banks, such as JPMorgan, Goldman Sachs, Merrill Lynch, and Bank of America.

Summary of expectations for 2023:

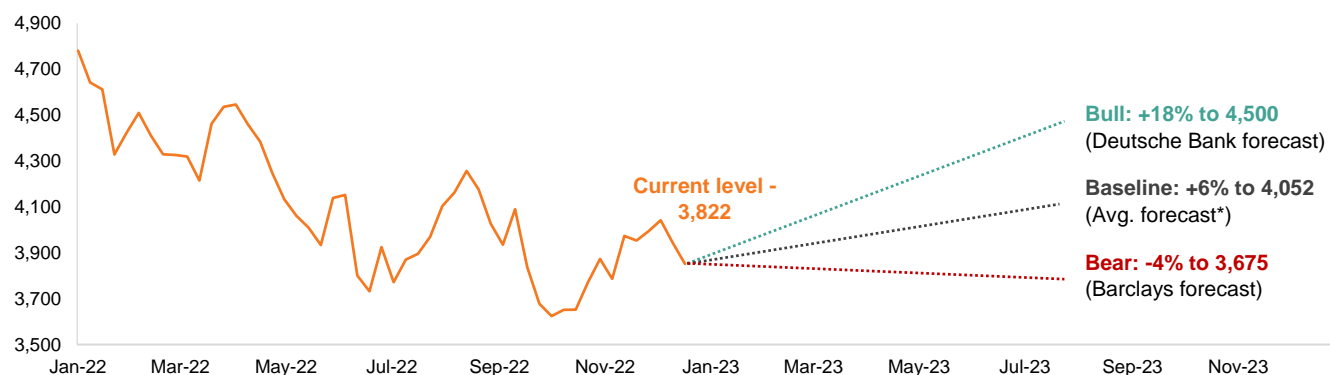
- Global economic growth is expected to slow, with emerging markets outperforming developed ones
- Inflation is expected to moderate globally, allowing central banks to pivot in late 2023
- 1H23 is expected to be tough for equities, with most of the recovery taking place in 2H23. Consequently, defensive portfolio positioning is favored in 1H23, while a shift towards cyclicals is optimal in 2H23
- Fixed income yields look very attractive. Prices are expected to recover in 2023 as central banks cut rates

Assumptions underlying baseline scenario:

- Russia-Ukraine war does not escalate
- China's economy reopens as the pandemic-related regulations are lifted
- No new inflationary forces emerge (e.g., supply chain disturbances)

Given these prerequisites are fulfilled, the baseline scenario is expected to take place. However, if any of the fundamental beliefs fail to materialize, the outcome may deviate significantly from the central projection. For more detailed scenario analysis, please refer to the Table 3 of central projections and risks on Page 5.

Figure 1: S&P 500 2023 year-end performance forecasts



Source: Bloomberg, Deutsche Bank Research, Barclays Research, Galt & Taggart Research

2. 2022 Recap – A Big Turmoil

Global Pandemic, Major War in Europe, and China's Freeze: a Kickback From 40 Years of Great Moderation

2022 has been full of big events: the post-pandemic world had to face a major war in Europe and restricted Chinese economy, with former resulting in a painful energy crisis and latter – in prolonged supply chain disruptions. Both events have fueled inflation globally which, although seemingly moderating, stands at historically elevated levels. The problem is particularly evident in western developed economies, where soaring energy prices and reduced supply of food commodities are major contributors to inflation. Meanwhile, the problem is further exacerbated in the US due to an unusually resilient labor market.

The supply-side struggles and resulting inflation have forced the major central banks to implement contractionary monetary policies with largely unprecedented pace and intensity. The US Federal Reserve, European Central Bank, and Bank of England have already hiked 425 bps, 250 bps, and 325 bps, respectively. Other monetary authorities have also mimicked the path. Importantly, the hiking cycles are not yet over and will likely continue until 1Q23-2Q23.

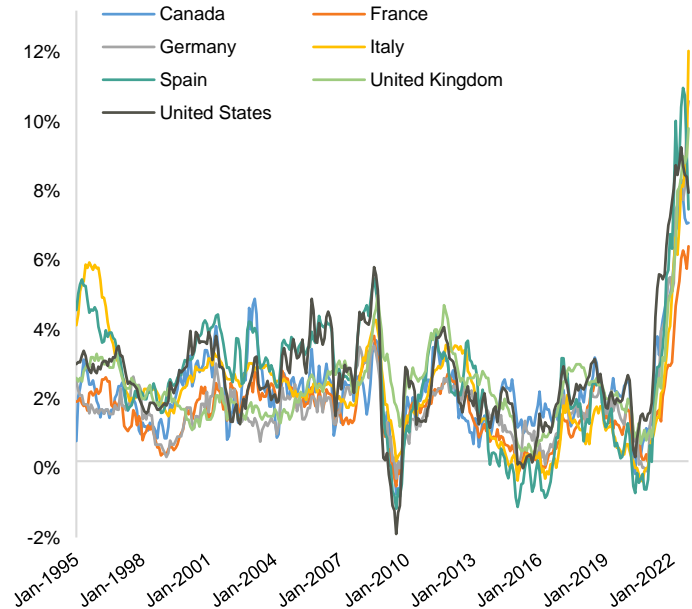
Failure of 60/40 Portfolio Strategy: Equities and Fixed Income End Up Correlated

Perhaps the saddest peculiarity of 2022 was the positive co-movement between equity and fixed income securities. While equities quickly lost the ground as the Russia-Ukraine war unraveled, corporate bond prices also declined in response to the rising central bank rates (for bonds to remain competitive, their yields must correspond to those of alternative fixed income instruments, such as of treasuries) (see Figure 3).

This dynamic has made the traditional portfolio risk management strategy obsolete, as equity losses could no longer be diversified away with fixed income instruments. Moreover, alternative hedge assets, such as crypto currencies (e.g., Bitcoin), precious metals (e.g., gold and silver) and many commodities have also declined, therefore, providing no diversification benefit similarly to fixed income.

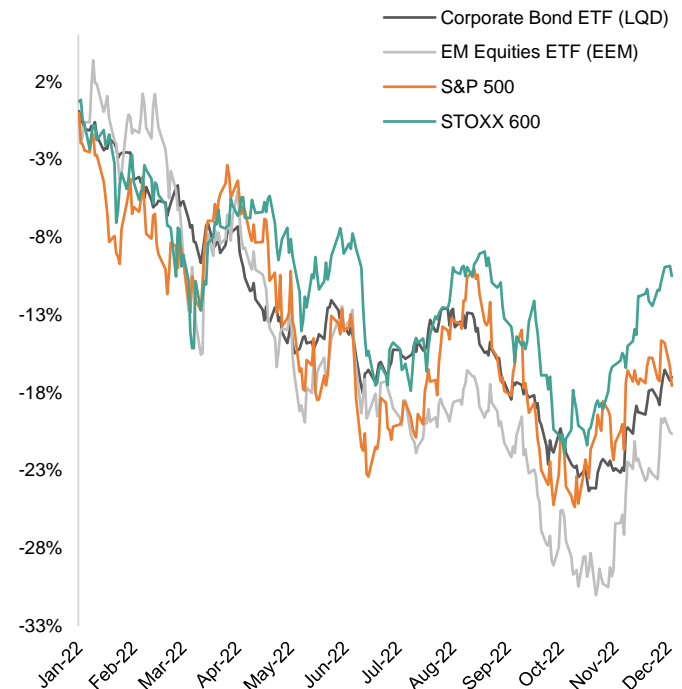
2022 has also been painful for foreign currencies. As the Federal Reserve kept hiking, the USD became a more appealing currency to hold. As a result, demand for others fell and EURUSD and GBPUSD reached the lowest levels in the near past.

Figure 2: Inflation reached historic highs in developed economies



Source: OECD, FRED, Country Data

Figure 3: Global equities and fixed income decline in tandem, YTD performance



Source: Bloomberg

3. Global Economic Outlook for 2023 – EMs Grow, DMs Don't

Summary of Global Economic Outlook

Economic outlook is more promising for emerging markets than for developed ones. This is because the post-pandemic recovery has been 'delayed' for EMs, while DMs generally dealt effectively with COVID-19 and saw quicker rebounds. The likely catalyst to prevail next year in Asia is China's economic reopening to be achieved by relaxed pandemic-related regulations.

Another important distinction between developed and emerging economies is in terms of inflation. In the US, strong consumer balance sheets and tight labor market have created resilient demand that fueled strong price increases. Meanwhile, Europe is facing an intense energy crisis, producing a fully supply-led inflation. In contrast, the weaker demand conditions in EM have resulted in inflation rates below the western figures. As of now, central banks in most Asian economies are under no rush to restrict the activity and, therefore, will allow their economies to operate at production potential in 2023.

United States – No Recession With Cooling Inflation

Most of the selected research institutes agree that the US combating inflation without tipping into a recession in 2023 seems more likely than not. However, certain prerequisites need to be fulfilled for this to happen.

Firstly, in order to tame inflation in a swift and sustainable manner, the US GDP growth must be contained at a below-potential level. Despite the fact that the recent fiscal tightening efforts have largely exhausted their potential, aggressive hiking by Federal Reserve makes this realistic.

Secondly, demand for labor needs to moderate. Up until now, even with strong payroll figures, the jobs-workers gap has been shrinking considerably. If demand keeps declining through lower job openings, nominal wage growth will moderate and, in effect, inflationary pressures will ease.

However, skeptics, like BlackRock Research Institute, argue that reducing inflation to the target level of 2.0% will require 'breaking' labor market, which naturally implies a recessionary scenario (although a mild rather than a deep one). Blackrock estimates the probability of the US entering a recession in 2023 at 40%.

Source: JPMorgan Research, BlackRock Research Institute, Merrill Lynch

Table 1: Real growth consensus forecasts, % y/y

| Country | 2023 (f) | 2024 (f) |
|------------|----------|----------|
| US | 0.4 | 1.4 |
| Euro Area: | -0.1 | 1.5 |
| Germany | -0.7 | 1.3 |
| France | 0.4 | 1.3 |
| Italy | -0.1 | 1.2 |
| Spain | 1.0 | 2 |
| UK | -0.5 | 1.1 |
| Japan | 1.4 | 1.1 |
| Canada | 0.6 | 1.7 |
| China | 4.8 | 4.9 |
| India | 5.8 | 6.6 |
| Brazil | 0.8 | 1.9 |
| Russia | -3.2 | 1.5 |
| World | 1.8 | 2.6 |

Source: Bloomberg consensus forecasts

Table 2: Goldman Sachs has more optimistic expectations on the US economy vs consensus view

| Indicator* | 2023F | 2024F | 2025F |
|--------------------------------|-------|-------|-------|
| Output and Spending | | | |
| Real GDP growth | 1.1 | 1.6 | 1.9 |
| Consumer expenditures | 1.9 | 1.8 | 1.9 |
| Industrial production | 1.5 | 2.5 | 3.2 |
| Business fixed investment | 1.9 | 3.3 | 3.6 |
| Housing Market | | | |
| Housing starts ('000s) | 1,570 | 1,570 | 1,570 |
| Home sales ('000s) | 3,831 | 4,147 | 4,509 |
| Home Prices | -7.5 | -2.2 | 3.8 |
| Inflation | | | |
| CPI | 3.2 | 2.6 | 2.5 |
| Core CPI | 3.2 | 2.7 | 2.5 |
| Core PCE | 2.9 | 2.4 | 2.2 |
| Labor Market | | | |
| Unemployment rate | 4.1 | 4.2 | 4.2 |
| Payrolls ('000s, avg. monthly) | 29 | 52 | 60 |
| Avg. earnings/hour | 4.2 | 3.7 | 3.3 |

*Note: % y/y change unless specified otherwise
 Source: Goldman Sachs Research

Europe – Mild Recession with ECB and BoE Remaining in Restrictive Zones

2023 economic outlook has improved for Europe, as the region proved surprisingly resilient to Russia's natural gas supply cuts. However, the energy crisis, a notorious by-product of Russia-Ukraine war, is still expected to tip European economies into a mild recession. Energy Intensive Industries (EII), (e.g., refineries and manufacturers of chemicals, metals, glass, etc.) are expected to struggle the most, especially as governments' fiscal support fades.

Italy and Germany, where headline inflation reached 11.8% and 10.0%, resp. in late-2022, are expected to have tougher year than Spain and France, where inflation figures are almost half as much. Recession in the UK is expected to be more intense than in continental Europe, due to less fiscal intervention, stronger supply constraints, and tighter labor market that predicts higher inflation.

Lastly, inflation is unlikely to have peaked in Euro Area, since the momentum of price increases is still strong. As a consequence, ECB is expected to terminate at a base rate of 3.0% (see Figure 4), while Bank of England is likely to stop at 4.5% (pivot for both expected in 2H23).

China – Reopening After a Long Freeze

The dim outlook for Chinese economy has improved in response to recent signs that the government may lift pandemic-related regulations sooner than previously expected. Chinese equity markets were quick to respond to the positive news (see Figure 5).

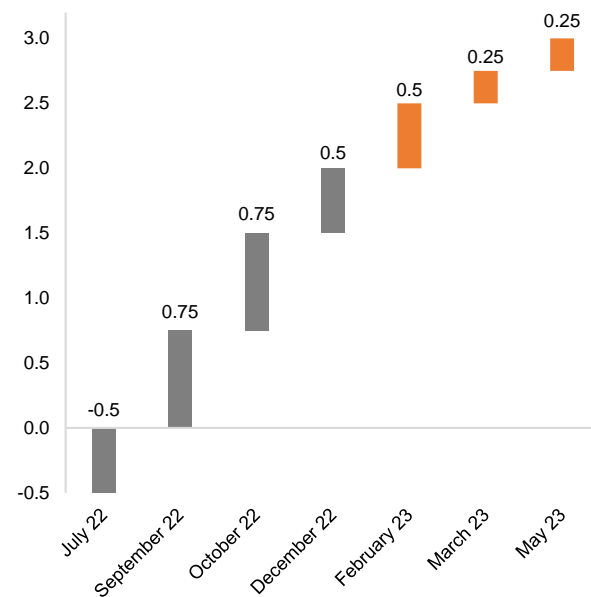
The consensus forecast for China's real growth in 2023 is 4.8% y/y, which is well above the global average of 1.8%. However, much of this growth is expected to be delivered in 2H23, as easing the zero-Covid policies in 1H23 will likely result in more intense virus transmission and, consequently, in slower recovery of both demand and supply.

Despite strong overall growth, a significant asymmetry is expected among the components of the Chinese economy. Consumption is expected to recover significantly, with sectors most affected by pandemic-related regulations, such as travel and entertainment, to outperform. Meanwhile, fixed investments, manufacturing and exports are expected to decelerate in response to weaker global demand.

Perhaps the biggest merit from China's reopening is that it will ease the global supply chain pressures, therefore, providing downward pressure on global inflation. Importantly, however, the rebound is also likely to increase commodity prices, especially of energy and industrials (e.g., oil and natural gas).

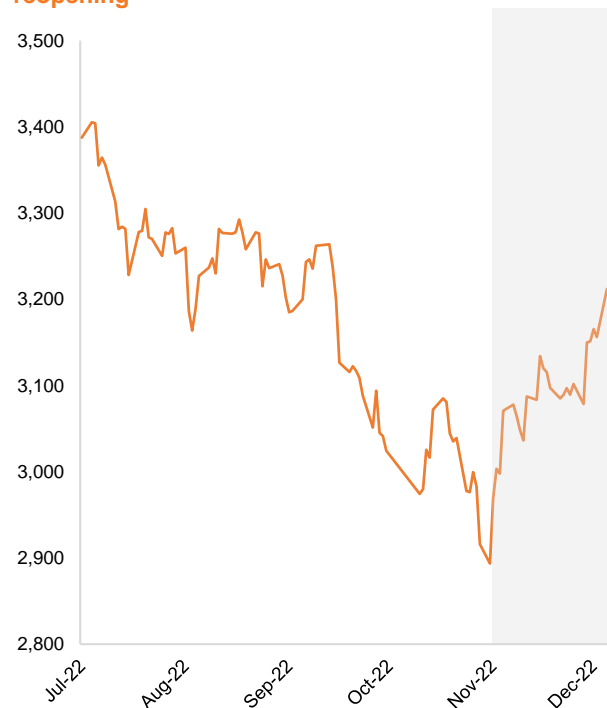
Source: JPMorgan Research, World Bank, IMF

Figure 4: Realized and expected ECB base rate dynamic, %



*Grey columns indicate realized rate hikes, orange columns indicate expected rate hikes
 Source: Goldman Sachs Research

Figure 5: Shanghai Stock Exchange Index (SEE): Chinese equities surge on signs of economy reopening



Source: Bloomberg

Overall, Global Recession is Unlikely But Risks are Evident

To conclude, global recession in 2023 is unlikely. However, as already noted, conditions of global economy and, hence, of capital markets may deviate from the projected baseline scenario, which is based on three fundamental beliefs: firstly, geopolitical tensions, namely the Russia-Ukraine war, should not escalate, secondly, the Chinese economy should reopen as the government abandons its zero-Covid stance, and lastly, no further inflationary pressures should arise.

If any of these preconditions fail to materialize, global inflation is likely to remain elevated, which will force central banks to stay in contractionary policy zones. This will most likely tip most DMs into recession by restricting economic activity and slashing demand. In effect, weaker demand from western economies will have a negative impact on Asian exports and, therefore, on its economic growth. In such case, it is natural that the impact on financial markets will also be negative.

Alternatively, an optimistic scenario is implied by either a quicker-than-expected resolution to the Russia-Ukraine war and/or swifter removal of pandemic-related restrictions in China. In such case, central banks will quickly pivot back to the neutral/expansionary policy stance, allowing for economic growth which will likely initiate a strong rally in equities, fixed income, and industrial commodities. A quick summary of potential developments in terms of global economy, macroeconomic policy, and capital markets is provided below.

Table 3: Central projections and risks for 2023

| | Baseline | Downside | Upside |
|-----------------|--|--|---|
| Global Economy | Mild recession: inflation cools as labor market loosens, supply chain disturbances soften, and geopolitical tensions do not escalate. Housing market suffers but by less than in 2008. | Deep recession: inflation persists as geopolitical tensions intensify. Lower business confidence and profitability leads to higher unemployment. Consumption suffers as, despite nominal wage increases, real wages fall. | Growth recovers, no recession: inflation cools without unemployment rising as geopolitical tensions ease and energy and food costs decline. Higher business confidence leads to increased capex and growth recovery. |
| Policy | Monetary: Fed terminates at 5%, ECB – at 3%, BoE – at 4.5%. Fiscal: divided Congress hinders fiscal intervention in the US; Energy-related stimuli continue in Europe | Monetary: central banks tighten more aggressively to combat sticky inflation. Growth is compromised. Fiscal: no significant fiscal support due to higher costs of borrowing | Monetary: central banks turn dovish, terminal rates and persistence of high rates decrease. Fiscal: lower borrowing costs create more room for fiscal support. |
| Capital Markets | Fixed Income: treasuries deliver positive returns. Low risk corporate bonds outperform treasuries. Equities: broad market delivers positive returns. Value stocks outperform. FX: USD remains well supported. | Fixed income: equity losses cannot be diversified as treasuries struggle. Credit spreads widen, particularly for riskier sectors. Equities: earnings are hit hard and broad market declines. Quality and defensives outperform. FX: safe-haven flows boost USD. | Fixed Income: treasuries deliver positive returns. Riskier fixed income securities outperform. Equities: broad market delivers strong positive returns, with cyclical sectors outperforming. FX: USD depreciates as growth diversifies geographically. |

Source: JPMorgan Asset Management

4. Equity Markets Outlook for 2023 – It's All About Inflation

Two Contrasting Halves of 2023

1H23 is expected to be tough for equity markets. As long as inflation expectations do not improve considerably, central banks will remain hawkish and, consequently, equity valuation multiples will remain at current reduced levels. Furthermore, if inflation expectations worsen, central banks will tighten more and valuations will decline further.

Importantly, the downside risk for stock prices is limited. During the previous market downturns, equities have usually bottomed during the mid-to-late stages of recessionary periods. This time, however, markets have fallen significantly more in the preliminary phase and, therefore, much of the further economic turbulence is most likely priced in. This would make the current economic downturn better predicted than all the previous ones.

Overall, the downside risk in 1H23 can be reduced with long positions in dividend stocks, as such companies usually manage to make dividend payments even when earnings-side is suffering. It is also noteworthy, that large dividend-paying companies are found across all sectors, therefore, allowing for effective portfolio diversification.

Lastly, sectors and regions with resilient earnings, low leverage, and strong pricing power can be good sources of portfolio risk reduction. Health Care, Utilities, and Consumer Staples sectors are the most common defensive areas, with Health Care seemingly offering the best valuations as of today.

In 2H23, however, inflation in western DMs is expected to moderate with a convincing pace. This will push central banks to gradually abandon contractionary monetary policies, thus, reducing the discount rate for equities and leading to a rally in their market prices. As the inflation outlook improves, risk-taking in financial markets will be more justified, advocating a shift towards cyclical sectors in 2H23.

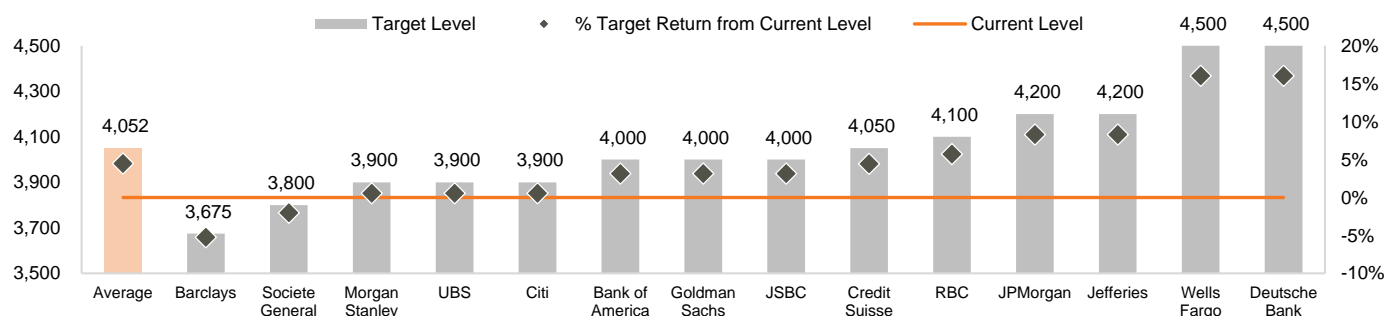
Technology, Communications, and Consumer Discretionary provide the highest growth potentials, as they are the most de-rated sectors in 2022. Because earnings and valuations of companies from these sectors are highly interest-sensitive, pivot from central banks is likely to lead to sizeable rallies in these sectors.

Table 4: All major equity indexes declined sharply in 2022

| Index | % YTD Change | P/E |
|-------------------|--------------|------|
| S&P 500 | -19.1 | 20.2 |
| Down Jones | -8.8 | 19.4 |
| NASDAQ | -32.4 | 25.2 |
| FTSE 250 | -20.8 | 9.6 |
| CAC 40 | -12.2 | 13.7 |
| DAX | -11.7 | 13.8 |
| STOXX 600 | -9.5 | 12.0 |
| Nikkei 225 | -21.8 | 10.9 |
| SSE | -15.1 | 12.8 |
| MSCI EM | -18.6 | 17.1 |
| MSCI EAFE | -19.1 | 20.2 |
| MSCI World | -8.8 | 19.4 |

Source: Bloomberg

Figure 6: S&P 500 index level forecasts for end of 2023



Source: Forecasts are taken from the research data of respective companies

US Sector Outlooks for 2023 (part 1)
Technology ETF Ticker: XLK ETF YTD Change: -29.1%

After an intense de-rating, IT sector is priced attractively and provides sizeable upside potential. Sector is characterized with exceptionally high profit margins (c.20%, which is almost double the global equity average) and has strong earnings growth prospect even in the context of macroeconomic headwinds. Software and Services are rather attractive sub-sectors, as large part of revenues are recurring, reducing the downside risk for earnings. Similarly to other cyclical sectors, however, 1H23 is likely to be tough for tech stocks in general.

Health Care ETF Ticker: XLV ETF YTD Change: -2.5%

Health Care seems to be priced more attractively than other defensive sectors. Earnings are also in line with the global equity benchmark. Health care equipment is expected to be the main driver of growth, while pharmaceuticals can effectively hedge the valuation risk. Importantly, however, USD depreciation is an important risk, as the sector benefitted significantly from strong currency in 2022. Long-term growth prospects are also evident in the light of increasing access to health care in EMs, aging populations in DMs, and promising pace of technological innovation.

Energy ETF Ticker: XLE ETF YTD Change: 47.5%

Performance of energy sector fully depends on macroeconomic and geopolitical developments, which are usually hard to predict. However, given the baseline scenario described earlier in the report, high oil and other energy commodity prices are not sustainable: firstly, the expected economic slowdown in west will reduce demand and secondly, non-OPEC supply is expected to increase. Despite tactical unattractiveness, the strategic (long-term) investment opportunities in sustainable energy industries look appealing.

Financials ETF Ticker: XLF ETF YTD Change: -14.6%

Financial sector is expected to perform well in 2023 as it will most likely remain well-supported by high central bank rates that tend to impact earnings and interest revenues positively. Despite being cyclical in nature, the sector is well positioned to weather an economic slowdown, as the post 2008-crisis regulations have ensured financial companies are capitalized well enough to withstand large losses during recessions.

Consumer Discret. ETF Ticker: XLY ETF YTD Change: -38.9%

Overall, sector is expected to underperform during 1H23. However, due to its cyclical nature, it is also likely to rebound as rates stop rising. Luxury segments within the sector are expected to outperform, as high-end consumers provide resilient demand that implies strong pricing power. Moreover, reopening of the Chinese economy is expected to boost both such industries and the general sector.

*Note: 12M upside refers to the average analyst forecast on respective stock's return during next 12 months
 Source: Credit Suisse, S&P Capital IQ

Table 5: High-conviction stocks from respective sectors

| Company | 12M upside, %* |
|------------------|----------------|
| PayPal (PYPL) | 58.8 |
| SalesForce (CRM) | 55.5 |
| Apple (AAPL) | 36.5 |
| QualComm (QCOM) | 34.5 |
| Intuit (INTU) | 31.8 |

| Company | 12M upside, %* |
|--------------------------------|----------------|
| Iqvia Holdings (IQV) | 26.4 |
| CVS (CVS) | 26.0 |
| Humana (HUM) | 22.5 |
| Thermo Fisher Scientific (TMO) | 18.3 |
| Regeneron Pharma (REGN) | 16.7 |

| Company | 12M upside, %* |
|----------------------------|----------------|
| Devon Energy (DVN) | 40.1 |
| Valero Energy (VLO) | 26.6 |
| ConocoPhillips (COP) | 23.0 |
| Occidental Petroleum (OXY) | 22.0 |
| EOG Resources (EOG) | 20.5 |

| Company | 12M upside, %* |
|-----------------------|----------------|
| Wells Fargo (WFC) | 29.5 |
| UBS (UBS) | 28.1 |
| Bank of America (BAC) | 21.9 |
| Citi Group (C) | 19.7 |
| Charles Schwab (SCHW) | 16.7 |

| Company | 12M upside, %* |
|--------------------|----------------|
| Tesla (TSLA) | 121.8 |
| Amazon.com (AMZN) | 69.3 |
| Ford Motors (F) | 54.7 |
| Target (TGT) | 24.5 |
| Booking.com (BKNG) | 18.0 |

US Sector Outlooks for 2023 (part 2)
Consumer Staples ETF Ticker: XLP ETF YTD Change: -3.0%

Due to its defensive nature, Consumer Staples was one of the most resilient sector in 2022, next to Utilities and Energy. The sector component companies are characterized by stable earnings and profit margins that ensure low volatility in equity prices. Consequently, this sector is a worthy portfolio component during the potentially troublesome 1H23. Conversely, Consumer Staples is very likely to lag the market-wide rebound, which is expected to follow the signs of global economic recovery in mid-2023.

Communications ETF Ticker: XLC ETF YTD Change: -39.5%

Communications sector was the biggest underperformer in 2022 and, as a consequence, equities are now extremely de-rated. This is especially true for large-cap stocks, like Meta, and Google. Even though advertising revenues are expected to struggle further, a strong sector-wide rebound is likely as soon as central banks stop hiking. Earnings in the sector are expected to grow twice as fast as in general equity markets. Media and entertainment seems to have the highest growth prospect, as telecommunication stocks are well-priced with high dividend yields.

Industrials ETF Ticker: XLI ETF YTD Change: -6.8 %

Much like Materials, Industrials is a very cyclical sector, correlating strongly with manufacturing and industrial production in the economy. Therefore, despite surprising resiliency in 2022, sector is not expected to perform well next year, as global production is expected to slow. Capital goods and transportations industries are expected to underperform the sector, while aerospace and defense are potential outperformers given geopolitical tensions remain elevated or escalate. Lastly, China's quicker-than-expected rebound will be an important upside catalyst.

Materials ETF Ticker: XLM ETF YTD Change: -58.0%

Due to its strict cyclicity, Materials sector was the worst performer in 2022. Because goods sector is expected to be hit the hardest during an anticipated economic slowdown, manufacturing sub-sector is likely to suffer. Metals and mining sub-sector also looks unappealing, as slowdown in housing market implies less construction spending. Meanwhile, high energy costs are weighing on sector profit margins. Therefore, earnings of Materials sector has significant downside risk in 2023. Similarly to Industrials, however, China's rebound will impact the sector positively.

Utilities ETF Ticker: XLU ETF YTD Change: -1.0%

As the second best performer sector in 2022, Utilities is expected to do well in 2023 as well. Sector earnings are expected to stay resilient, as the non-cyclical nature of the sector component companies has historically demonstrated. The sector upside potential stems from the greater need of renewables, as the supply conditions of traditional energy commodities (i.e., crude oil and natural gas) is becoming increasingly uncertain.

Source: Credit Suisse, S&P Capital IQ

Table 6: High-conviction stocks from respective sectors

| Company | 12M upside, % |
|----------------------------|---------------|
| Kroger Co (KR) | 24.9 |
| Constellation Brands (STZ) | 20.9 |
| Costco (COST) | 19.1 |
| Tyson Foods (TSN) | 17.5 |
| SYSCO (SYY) | 15.0 |

| Company | 12M upside, % |
|-------------------------------|---------------|
| Warner Bros Discovery (WBD) | 107.4 |
| Fox (FOX) | 47.9 |
| Charter Communications (CHTR) | 45.7 |
| Alphabet (GOOGL) | 44.3 |
| Meta Platforms (META) | 28.0 |

| Company | 12M upside, % |
|-----------------------|---------------|
| L3Harris Tech (LHX) | 26.0 |
| FedEx (FDX) | 16.0 |
| General Electric (GE) | 15.0 |
| General Dynamics (GD) | 15.0 |
| Boeing (BA) | 11.0 |

| Company | 12M upside, % |
|--|---------------|
| Albemarle (ALB) | 30.1 |
| Corteva (CTVA) | 26.5 |
| International Flavors & Fragrances (IFF) | 20.6 |
| DuPont de Nemours (DD) | 17.1 |
| Newmont (NEM) | 15.9 |

| Company | 12M upside, % |
|--|---------------|
| Dominion Energy (D) | 18.2 |
| NRG Energy (NRG) | 15.0 |
| Public Services Enterprise Group (PEG) | 14.3 |
| NextEra Energy (NEE) | 12.5 |
| Constellation Energy (CEG) | 12.0 |

Emerging Markets – bright spots during uncertainty

Similarly to DMs, EM equity markets have also struggled considerably in 2022 due to geopolitical uncertainties, intense Fed hiking, slow global growth, and China's economic lockdown. As a result, equity valuations have declined significantly and now look attractive relative to the global average (see Figure 7). The JPMorgan valuation index stands well below historical averages for most EMs (excluding India), which is the opposite for the global equity index (ACWI). Meanwhile, Taiwanese, Brazilian, and South African equities offer the lowest valuations. Some of the largest publicly-listed companies from these countries include Taiwan Semiconductor Manufacturing (TSM), Foxconn, and MediaTek (MTDKF) from Taiwan; Vale (VALE), Petrobras (PBR), and Ambev (ABEV) from Brazil; and Naspers (NAPRF), FirstRand (FANDF), and Vodacom (VODAF) from South Africa.

As shown in Table 8 on the right hand side, price-to-earnings ratios of EM equity markets stand well below the DM figures.

Source: Credit Suisse Research

Table 7: High growth potential single stocks from EM markets

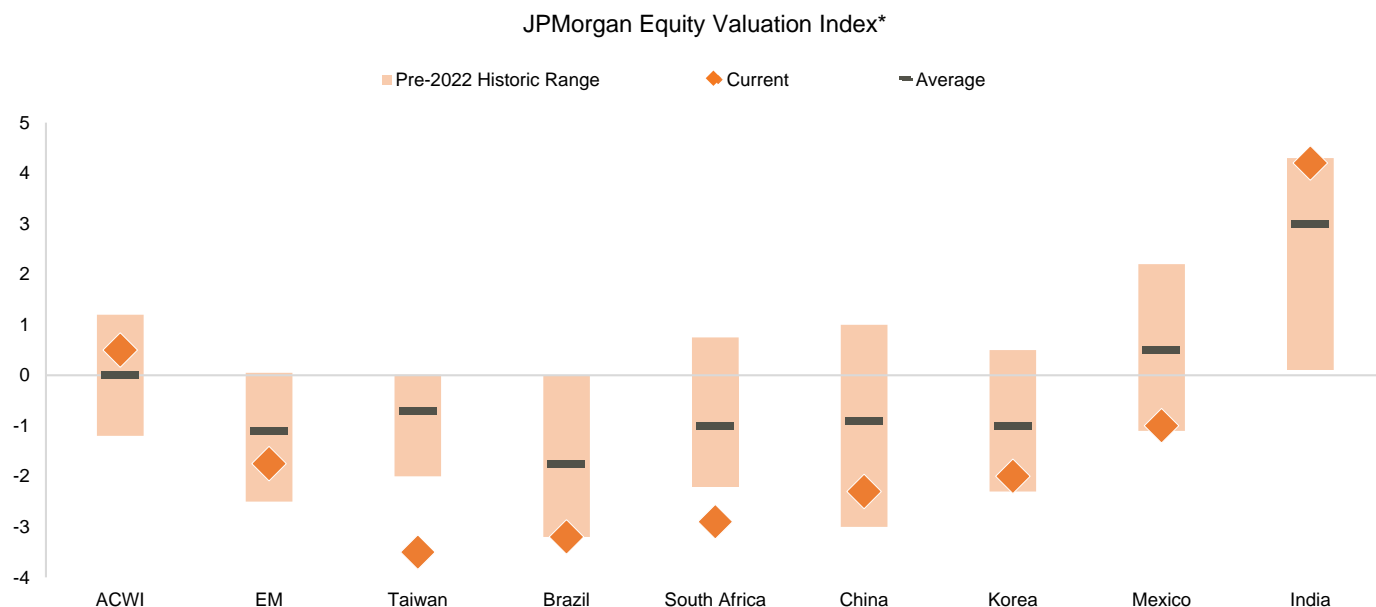
| Company | Country | 12M Upside, % |
|-----------------------------|-----------|---------------|
| Daqo New Energy (DQ) | China | 58.7 |
| Alibaba (BABA) | China | 52.3 |
| Sigma Lithium (SMGL) | Brazil | 50.4 |
| Itau Unibanco (ITUB) | Brazil | 47.1 |
| Sociedad Quimica (SQM) | Chile | 40.2 |
| Taiwan Semiconductors (TSM) | Taiwan | 38.6 |
| Baidu (BIDU) | China | 30.7 |
| Makemytrip (MMYT) | India | 26.6 |
| Vale (VALE) | Brazil | 10.5 |
| YPF Sociedad Anonima (YPF) | Argentina | 8.6 |

Table 8: Top 3 EM Equity ETFs

| ETF Ticker | Country | YTD, % | P/E | AUM, \$mn |
|------------|---------|--------|------|-----------|
| MCHI | China | -23.0 | 10.8 | 6,260,186 |
| EWZ | Brazil | 12.2 | 5.4 | 4,704 |
| EWT | Taiwan | -27.3 | 10.6 | 3,717 |
| EWY | Korea | -25.5 | 8.4 | 3,252 |
| EWX | Mexico | -4.7 | 8.3 | 1,015 |

Source: Bloomberg

Figure 7: EM equity valuations look more attractive than the global average (ACWI)



*Note: Index is a composite of the following valuation metrics: P/E, P/B, P/CF, and dividend yield. Vertical axis displays standard deviation from global average
 Source: JPMorgan Research

5. Fixed Income – Yields on the Rise

Pain in 2022, Gain in 2023

2022 has been an extraordinarily alarming year for fixed income investors. As central banks lifted rates and liquidity shocks fueled volatility, bond markets have been re-priced considerably, delivering losses of historical amounts (see Figure 9).

In effect, the yields on fixed income instruments have surged (see Figure 8), with the total amount of negative-yield debt shrinking to a mere \$2tn from the peak of \$18tn in late-2020 (yield and price of fixed income instruments are negatively correlated). With such a favorable starting point (i.e., low prices, high yields), fixed income markets now offer risk-reward combinations of rare occurrence.

In addition to having a high return potential, fixed income is also looking to regain its role as a portfolio risk diversifier. After a year-long elevated correlation with equities, in 2023, bonds are expected to be a good hedge with respect to risk assets – a typical setting observed during the times of normal inflation levels.

Investment Grade and EM as Bright Spots

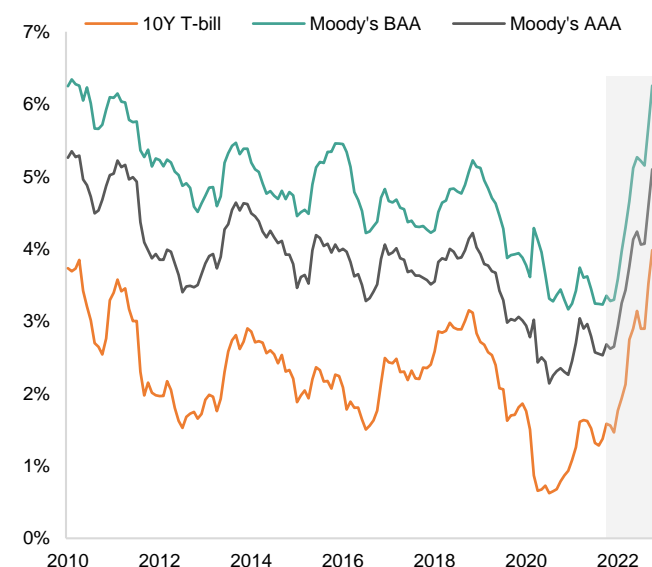
Among the sub-asset classes, investment grade fixed income (i.e., corporate bonds with a minimum credit rating of BBB) looks exceptionally attractive. While credit fundamentals remain firm, spreads on IG bonds are already getting closer to those observed during the 2020 markets downturn. Moreover, as inflationary pressures ease and central banks pivot from current contractionary monetary policies, the positive price returns of IG bonds will likely be strongly catalyzed.

Emerging market hard currency* (EM HC) bonds are also expected to perform well in 2023. The increased size of coupons hedge the risk of further price de-rating, which is a major risk, despite the resiliency of fundamental indicators. The local currency sovereign bonds are expected to perform even better during 2H22, when the much-anticipated economic rebound will increase demand for local currencies and, therefore, lead to USD depreciation.

Source: Credit Suisse Research, JPMorgan Research, BNP Paribas Research

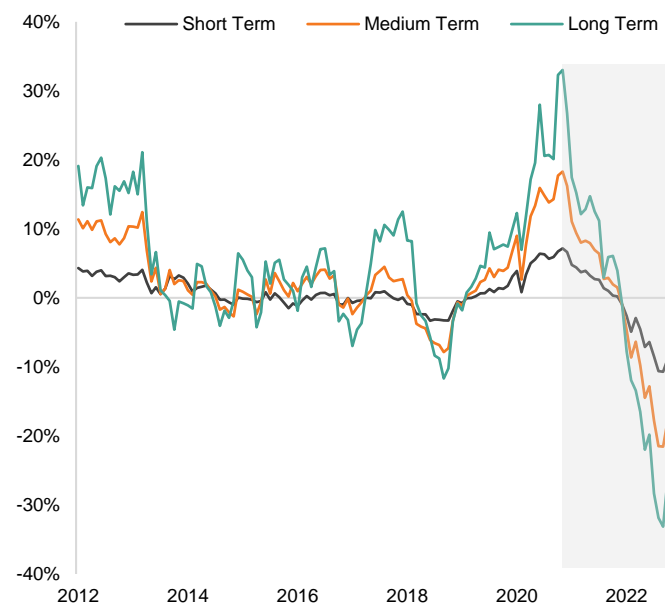
*Hard currency refers to relatively less volatile currencies, such as USD, EUR, GBP, AUD, CHF, and JPY.

Figure 8: Yields on Treasuries and corporate bonds surge



Source: Federal Reserve Economic Data (FRED)

Figure 9: M/M returns on Vanguard Corporate Bond Indexes



*Note: Indexes above track USD-denominated, investment-grade, fixed-rate US corporate bond universe. Short term includes bonds with maturity of 0-5 years, medium term – of 5-10 years, long term – of 10+ years.

Source: Bloomberg

Three Reasons to Invest in Fixed Income:

1. Historically, yields are more stable and sizeable component of fixed income returns

During past 20 years, yields (i.e., income) have been responsible for much larger portion of total returns than prices (see Figure 10). While price fluctuations do provide investors with profit opportunities, carrying bonds and collecting income implies much larger returns. Moreover, bond yields fluctuate significantly less than bond prices. Truly, the overall volatility of fixed income instruments is largely attributable to price movements (see Figure 11). These conditions coupled with the elevated yield levels make a strong case for investing in fixed income at current conditions.

2. Bonds can absorb more rate hikes as break-even points have risen

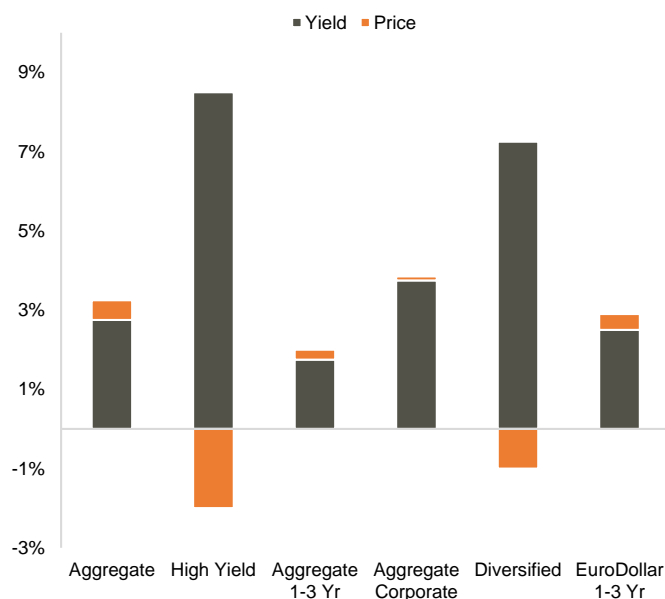
Break-even rate refers to the minimum discount rate that set an instrument's total return to zero (higher rate translates into lower instrument value). When bond yields are small, even a slight increase in fund rate can make the overall bond return negative. Conversely, when yields are high (as they are today) they provide a cushion to absorb potential interest rate rises. Current yields have increased the break-even points at least two-fold for all major fixed income asset classes.

3. Low-risk high-yield fixed income is finally available to investors

Lastly, the time has passed when achieving sizeable yields required taking more risk by either extending the maturity horizon (interest rate risk) or picking lower quality instruments (credit risk). Today, interest rate normalization from central banks across the world has allowed for substantial yields without the precondition of taking large risks. In late-2021, only quarter of instruments offered yields with yields of 2%+. Now more than 80% of the market yields that amount. This firstly provides an opportunity of receiving strong income from low-risk investments and secondly, the possibility to diversify across issuers, sectors, and regions.

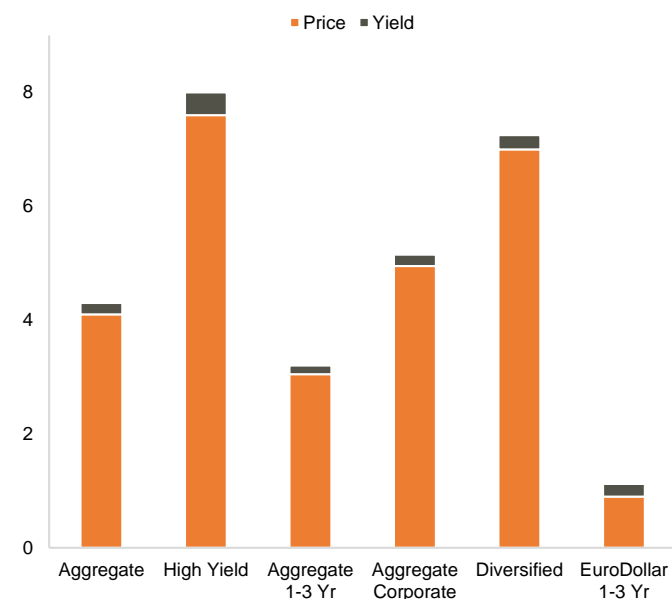
Source: UBS Research

Figure 10: Fixed income returns decomposed by price and yield



*Note: Data used is from past 20 years up until 31 October 2022
Source: UBS Research, BNP Paribas Research, Bloomberg

Figure 11: Fixed income volatility decomposed by price and yield



*Note: Data used is from past 20 years up until 31 October 2022. Vertical axis displays standard deviation
Source: UBS Research, Bloomberg

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