Bitterroot
CAPITAL ADVISORS

Q3 2022 Capital Markets Review

October 11, 2022

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Capital Markets

Equity markets declined by 6.8% in USD terms during Q3 2022 (ACWI Index), with YTD declines now at -24.3% through October 7, 2022.

The quarter was a tale of two halves. From June 30, 2022 through mid-August, the ACWI Index rallied by 10.7%. This rally was driven by much better-than-expected Q2 earnings coupled with a decline in bond yields following data showing that the pace of inflation was moderating.

However, the ACWI index then declined 15.9% from mid-August through September end. The sharp declines were driven by hawkish central bank rhetoric (dispelling notions of near-term policy pivots), inflation data that was higher than expectations, and indications of potential weakness emerging in corporate earnings (especially in the technology sector).

Bond yields increased sharply worldwide during the quarter. In the US, short-term (1-2 year) Treasury yields increased by 100-120bps during the quarter (some of the fastest increases over the last 20 years).

Government and investment-grade bonds declined sharply in the quarter but are now attractive from a risk/reward standpoint.

The Barclays US Aggregate Index declined by 4.7% during Q3, bringing YTD declines to 14.6%.

Unlike in recent history, bonds have not buffered equity market declines thus far in 2022. However, nominal bond yields have now increased to attractive absolute levels and are quite possibly close to peak levels.

As of October 7th, 1-3 yr. US Treasuries are yielding 4.2%+ and US investment-grade bonds are yielding 5.7%. The yield curve is inverted with short-term maturities yielding more than longer-term maturities (usually implying recessionary conditions or declining inflation expectations).

Historically, over a 7-year period, the starting bond yields have proved to be a good proxy for total expected returns. As such, safe bonds are now quite attractive from a risk / reward standpoint, assuming inflation declines as expected.

Corporate earnings growth is slowing rapidly, and earnings may actually decline in 2023

Analysts are forecasting 5% H2 2022 YOY growth for the S&P 500, a deceleration from the 10.5% H1 growth.

Capital Markets (Continued)

Analysts are also forecasting 8% S&P earnings growth in 2023 vs. 2022.

These views for 2023 seem far too optimistic as several leading economic indicators are slowing sharply. Significant USD appreciation will also negatively impact S&P 500 earnings (while positively affecting earnings of European and Japanese companies).

Given the nearly 25% declines in equity markets YTD, it is clear that investors do not believe the published estimates and are already factoring in some level of earnings decline over the next 12-24 months.

The question is the magnitude of the potential decline. In prior recessions, corporate earnings have declined 10%-30% for the S&P 500.

Our base case is that S&P 500 earnings declines will be towards the more optimistic end of that range given a) better quality companies comprising the index, b) higher levels of consumer and business profitability / financial health today vs. prior recessions, and c) lack of extreme bubbles or financial sector leverage which could lead to systemic collapses.

We are incorporating these views into portfolio positioning by:

- **Increased allocation to US Treasuries and US investment-grade bonds (especially at shorter maturities)**
- **Increased allocations to private strategies (private credit appears especially compelling)**

Strategic Asset Allocation View (7-years)

With equity valuations having declined significantly thus far in 2022, we now expect mid-to-high single digit nominal pre-tax annual equity returns (7.0%-8.5%) over a seven-year forecast period.

However, we anticipate significant volatility over the next 6-12 months as we are still in a monetary tightening regime while global economic indicators are slowing sharply (historically highly correlated to corporate earnings).

Geopolitical volatility may also rear its head at inopportune times.

The risk of policy mistakes (central banks hiking for too long) leading to a more severe recession or triggering a market crisis has increased as well.

US and Canadian government bond yields have increased sharply and are now attractive.

US and Canadian 1-2-year Treasury bond yields are now yielding roughly 400-420bps, and US Investment Grade corporate bonds are yielding 5.7%.

Safe fixed income is providing attractive risk-adjusted returns relative to equities.

Riskier credit assets (high-yield bonds and leveraged loans) are also now quite attractive over a mid-term time frame.

US high-yield bonds are now yielding close to 9.3% with 7-year forecasted annual returns of 8.3% (comparable to US equities).

However, on a nearer-term basis (next 12 months), high yield bonds could experience 10%+ further declines if credit spreads widen further with accumulating evidence of recessionary conditions.

Strategic Asset Allocation View (7-years)

Asset Class: Strategic Outlook (7-Year Timeframe)

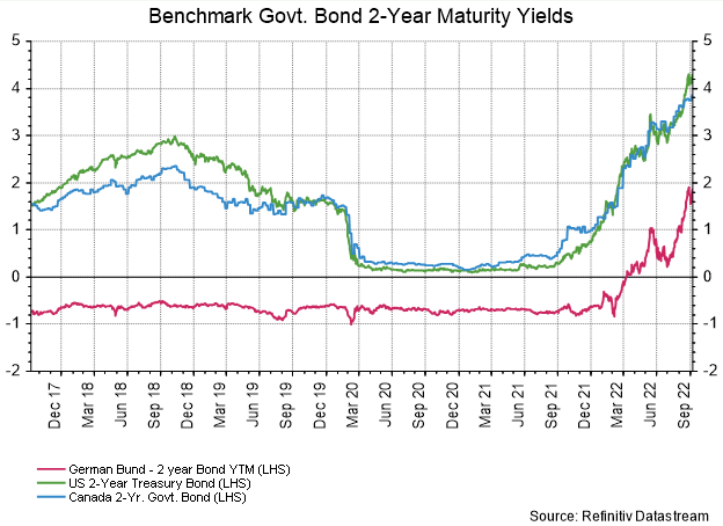
Equities	Negative - Neutral - Positive	Average Annual Return
US Large Cap (S&P 500)		Mid/High Single-Digit
US Small Cap (Russell 2000)		Mid/High Single-Digit
MSCI Europe		Mid Single-Digit
Japan Topix		Mid Single-Digit
MSCI Emerging Markets		Mid Single-Digit
Fixed Income		
US Treasury		Mid Single-Digit
US Corp Investment Grade		
US Corp High Yield		High Single-Digit
US Corp Levered Loans		
Alternatives, Private Equity and Real Estate		
Real Estate (Private) / Infrastructure		Mid Single-Digit
Alternatives (Hedge Funds)		Mid/High Single-Digit
Private Credit (New Funds)		Low DD - Mid Teens
Private Equity (New Funds)		Mid-to-High Teens

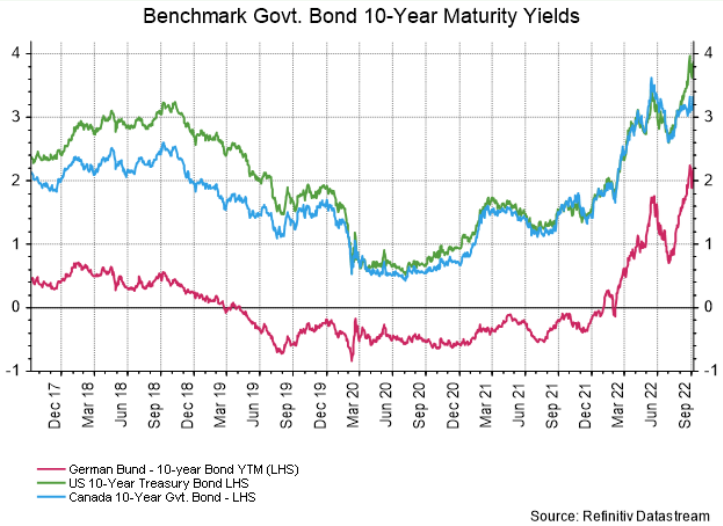
Inflation

Thus far, central banks have prioritized taming inflation and are willing to tolerate slowing economic growth and rising unemployment rates.

Central banks have engaged in a simultaneous global tightening cycle with several banks enacting outsized recent rate hikes (greater than 50bps per meeting). YTD, the pace of rate hikes has been among the fastest in history and has well-exceeded investor expectations. Bond markets have reacted in tandem with 2-year government bond yields increasing by 300-400bps over nine months, an unprecedented pace of increase.

Headline and core inflation remained at historically high levels as of August 2022 (at 8.3% and 6.3% YOY for the US respectively,10.0% and 5.3% YOY for Europe, and 7.0% and 5.8% for Canada). On a MOM basis in August, US headline inflation slowed to an increase of 0.1% (due to falling gas prices), but core inflation increased by a higher-than-expected 0.6% (with rising rents contributing significantly to the increase).





Inflation (Continued)

Inflation reports have been mixed, with some elements continuing to show increasing inflationary pressures and others showing signs of deceleration or even outright declines.

US Goods prices are declining sequentially given reduced demand (due to economic pressure and consumption shifting to services) at a time when supply chains are showing signs of improvement.

However, the ISM Services Index is still registering healthy levels of expansion, and services inflation remains robust and broadening across categories. Services inflation is also likely to remain high in the near term and tends to be stickier and longer lasting.

Labor markets continue to remain very tight in the US but are loosening modestly in Canada.

The US economy added 263,000 jobs in September (well above the pre-pandemic average monthly level of 190,000). The unemployment rate dropped to 3.5% from the prior months 3.7% and wage inflation remained high at 5% YOY and 0.3% MOM.

Unfilled job vacancies remain at abnormally high levels in the US. However, the JOLTS ratio experienced a sharp decline from 2.0 to 1.6 which represents a welcome sign to the Fed of loosening in the labor market.

Fewer job openings mean fewer employees quitting their jobs to make more money elsewhere, slowing labor churn and cooling the pace of wage inflation (which then spills over to other categories).

Canada's unemployment rate increased to 5.4% in August from 4.9% , a higher-than-expected increase (an indication that Canada's interest rate hikes are having the desired effect on the labor market). However, the rate declined to 5.2% in September, indicating a still tight labor market.

Both the Fed and the Bank of Canada are closely watching the labor market and wage growth. These central banks need to see better balance between labor demand and supply to avoid the potential of wage/price spirals leading to entrenched inflation.

There are signs that inflation may be peaking and may decelerate over the next several months and into 2023. The rate of slowdown and where inflation settles from a steady-state perspective remains to be determined.

Declining goods demand coupled with increasing supply (supply chains are showing consistent signs of improvement) is leading to declining prices for finished consumer goods (housing, apparel, electronics).

Inflation (Continued)

Several commodity prices (primarily metals and crude oil) have declined by 20%-30% from post Ukraine-war highs and in some cases are trading below pre-Ukraine-war levels.

Early signs of labor market cooling are beginning to emerge (significant reduction in JOLTS ratio from 2.0 to 1.6 in September coupled with increased mentions of layoffs or hiring freezes in certain sectors).

US gasoline prices have retreated meaningfully from earlier in the year highs through early October in response to falling oil prices. However, they have begun to trend up again over the most recent week as oil prices have increased from recent lows following the recent decision by OPEC+ to cut production.

Economic survey data (ISM Manufacturing Survey) are showing rapid decelerations in growth or in some cases absolute declines (factory new orders).

Inflation expectations seem well anchored for now. US 5-year and 10-year break-evens (inflation forecasts) have continued to decline, and are now at 2.4% and 2.3% respectively, levels last seen in March 2021.

Macroeconomic Conditions

The sharp rise in global interest rates coupled with US dollar strength not seen in 20 years is leading to sharply slowing global growth indicators and an increased probability of global recession (and potentially a market crisis as well).

In the US, new orders for housing have declined markedly and home prices are experiencing month-over-month declines. The Manufacturing PMI index is barely above expansion territory, with new orders having declined and signaling contraction.

In Europe, manufacturing PMIs are now reaching contraction levels (below 50) and business and consumer confidence sentiment is near rock-bottom levels.

China continues to implement its zero-COVID policy with periodic shut-downs of regions, which has led to inconsistent industrial and consumer activity.

Loosening COVID regulations may represent a tailwind to growth, stimulating China demand in 2023 and helping countries that export to China, especially European nations and Japan.

A recession in Europe seems highly likely given the combination of rising interest rates and high energy costs. Winter weather represents a significant wildcard.

European Real GDP growth surprised to the upside in Q2 due to a post-pandemic rebound in services and tourism.

However, soaring energy costs over the past few months coupled with rising interest rates has led to sharp declines in consumer and business confidence surveys (which are now at levels seen at the beginning of the pandemic).

The Eurozone Manufacturing PMI Index has steadily declined to 48.4 from 55.5 early this spring (below 50 indicates contraction). Unlike in the US, the Services PMI has also retreated into contraction territory at 48.8 as of September.

Europe appears to have secured adequate natural gas supplies to last through a normal winter. European nations have introduced consumer price caps and are already experiencing reduced industrial demand.

If the winter is colder than expected, energy prices may soar further which would likely necessitate gas rationing and further dampen consumer and business sentiment (likely tipping the Eurozone into a more severe recession).

Energy costs are still working their way through the economy, and monetary tightening began later than in the US. Thus, headline and core inflation are projected to remain elevated in Europe for longer.

Eurozone headline inflation rose to 10% in August with UK headline inflation near 10% for several months.

Macroeconomic Conditions (Continued)

Consumer health still appears strong (especially in the US and Canada). However, there appears to be bifurcation around the health of higher-income and lower-income consumers.

In the US, core retail sales were flat in August following a 0.4% MOM gain in July. The rate of growth has decelerated from the +0.6% MOM gains averaged over the first half of 2022.

US Credit card debt balances outstanding have reached the highest levels in history and may indicate that the lower-income consumer is becoming increasingly stretched by inflationary conditions despite significant wage gains.

Additionally, the personal savings rate has reached a multi-year low of 3.5%.

Shorter-term View

Recession risks, with the potential for declining corporate earnings, continue to increase (with earnings declines likely occurring during 2023). These risks are already reflected to some degree in risk-asset valuations.

Published sell-side analyst corporate earnings forecasts for 2023 are too optimistic and will likely be ratcheted downward over the next year. We believe that earnings downgrades for the S&P 500 will be less severe than for European equities (given less exposure to cyclical sectors).

Inflation data and the outlook for central bank policy, including interest rate hikes, will primarily determine equity market performance over the next 6-12 months.

More than earnings performance, equity markets are reacting in a highly sensitive manner to inflation and other economic data and the perceived implication for interest rate hikes (as seen in the wild swings in performance over the first and second half of Q3).

For the first time since the hiking cycle commenced, central banks (especially the US Fed) have delivered credible messaging in terms of magnitude of rate hikes, including forecasts for benchmark policy rates over the next 6-18 months.

Furthermore, bond market interest rate curves are generally in-line with these forecasts (suggesting the market is not expecting a significant policy pivot to rate pauses or cuts).

Investors currently expect interest rates to continue rising into 2023 and to remain higher for longer (in line with central bank forecasts).

With inflation showing signs of peaking and potentially slowing and with economic data slowing faster than expected, the Fed and other central banks may now have cover to pause rate hikes at levels below those expected by bond markets. If the economic slowdown occurs much faster than expected and inflation starts to decline at a faster rate, the narrative may shift towards rate cuts. Both of these scenarios would be welcomed by equity markets (which would look past corporate earnings declines).

On the other hand, continued strength in labor markets and wage inflation could lead the Fed to extend its rate hike cycle beyond what is currently contemplated. **The risks of policy mistakes via over-tightening is increasing considerably** which could trigger a global crisis with some sort of a market breakdown.

The pound's recent plunge following the unveiling of the UK government's planned tax cuts (largely scrapped since) led to necessary intervention by the Bank of England.

The Fed has historically had a poor record forecasting inflation and the effect on unemployment from rate hikes

We continue to see multiple potential paths for equity returns over the next 6-12 months.

Shorter-term View (Continued)

Scenario A: (Optimistic Case) – Inflation moderates faster than expected with mild economic and earnings recession. Fed pauses rate hikes at end of 2022 / early 2023.

Under this scenario, we see goods inflation reaching negative territory and shelter inflation starting to decelerate. The S&P displays earnings resiliency and investors price in that 2023 earnings represent trough earnings (with ~5% S&P 500 earnings declines vs. 2022) and look forward to resumption of earnings growth in 2024 with interest rates remaining stable / gradually declining. Equity markets may be near trough levels already (potential for another 5% declines) and could rally 15%-25% over the next 6-12 months (as was seen from end of June through mid-August).

Scenario B: (Base Case) – Slow moderation in inflation, rate hikes in line with expectations and modest corporate earnings recession.

Under this scenario, goods inflation declines or moves to deflation while services and shelter inflation remain higher than desired. The Fed continues hiking rates with a Fed Fund terminal rate of 4.75% reached in 2023. The US economy enters a mild recession with 2023 S&P 500 corporate earnings down 7%-12%% vs. 2022. Under this scenario, the S&P 500 could likely decline 10% from present levels (3,650 as of October 7, 2022). We expect periodic bouts of rallies and sell-offs as the ultimate path of rate hikes remains unclear and for markets to remain relatively range bound.

Scenario C: (Pessimistic Case) – Core inflation remains high or increases, leading to a repricing higher of Fed Funds terminal rate hikes and continued USD strengthening. A severe global recession with faster equity market declines followed by a sharp rebound once Fed policy pivots.

Under this scenario, investors begin to reprice Fed Funds terminal rates of 5%+. The chances of a global shock and severe recession increases. Under this scenario, S&P 500 earnings may decline 15%-20% and equity markets may decline by 20%+ from current levels over the next 6-9 months. However, such events also increase the chance for an ultimate swift Fed pivot with declining interest rates which would ultimately lead to sharp equity rallies. It is very conceivable under this scenario for the S&P 500 to fall to 3,000-3,200 level over the next 6-9 months followed by a sharp rally, ending 2023 at 3,800+.

Uncertainty regarding policy direction coupled with external wildcards (European winter weather, Ukraine / Russia war developments, China Covid policy) leads us to not place undue weight on any of the scenarios listed above.

With regards to legging into equities, for investors with a mid-term (5-year+ framework), we would look to modestly add equities around the 3,500-3,600 S&P 500 level, become more constructive at 3,200-3,300 and add aggressively at around 3,000 or below.

Equity Markets – Performance

Equity markets declined sharply, by 6.8% in USD terms, during Q3 2022 (ACWI Index) and are now down 24.3% YTD through October 7th.

The quarter was a tale of two halves. From 6/30 through mid-August, the ACWI Index appreciated by 10.7% as Q2 corporate earnings grew faster than expected and some initial positive signs of decelerating inflation emerged (accompanied by falling interest rates). Growth stocks sharply outperformed value stocks during this period (+14.8% vs. +6.7%) with the technology sector rallying 17.8%.

However, the second-half of the quarter was brutal, with the ACWI Index falling by 15.8% from mid-August through September-end. Growth stocks fell 18.1% during this period with the technology sector down 21.6%. Increasingly hawkish rhetoric from central banks (especially the US Fed) dispelled investor notions of potential for a near-term policy pivot and triggered a sharp move upwards in interest rates.

Energy and Consumer Discretionary sectors performed best in Q3 (-1.6% and -2.8%).

Materials and technology sectors performed worst in Q3 (-7.6% and -7.2% respectively).

Q3 corporate earnings season kicks off in earnest over the next few weeks. Analysts have taken down earnings growth expectations significantly heading into the quarter. As always, management commentary regarding forward-looking guidance is more important and will be closely scrutinized in terms of a) revenue growth assumptions and demand outlooks and b) margins – input and labor cost outlooks.

Cyclicals may experience short-term gains as many of these stocks are trading at sub-10x forward P/E with investors already discounting the potential for upcoming declines. Better than expected earnings forecasts may lead to 15%-20% relief rallies for sub-sectors such as US banks.

Large-cap technology companies may face near-term pressure as anecdotal commentary regarding weakening enterprise and small-business demand coupled with increasing currency translation pressures leads to lower than expected earnings outlooks. Valuations are still at absolute multiples of 20x+ forward P/E, even if those multiples are well lower versus beginning of the year levels.

Equity Markets - Performance (Continued)

For investors with a mid-term time frame, we continue to believe that stocks of high-quality companies will outperform given their strong business models, superior earnings growth and strong returns on capital.

Current valuations have significantly decreased for these companies relative to valuations at the beginning of the year. However, there may be some near-term stock price weakness for these quality stocks (especially in the technology sector) as 2023 earnings estimates likely need to come down and valuations are not screamingly cheap on an absolute level.

Value stocks may continue to outperform growth stocks until investors gain confidence that interest rates are closer to peak levels.

Equity Indices (as of 10/7/2022)

Total Returns (%) – USD

	YTD 2022	Jun-22 QTR	Annualized Returns 1Y	3Y	5Y	7Y
US Large Cap (S&P 500)	-23.0%	-5.0%	-16.4%	8.6%	8.7%	10.4%
US Small Cap (Russell 2000)	-23.4%	-2.2%	-23.4%	5.7%	3.7%	7.1%
MSCI EAFE	-25.3%	-9.4%	-23.2%	-0.8%	-0.4%	2.4%
MSCI Emerging Markets	-25.6%	-11.6%	-26.3%	-1.0%	-1.8%	3.2%
MSCI ACWI	-24.3%	-6.8%	-20.2%	4.8%	4.6%	7.0%
Russell 1000 Growth	-29.8%	-3.6%	-23.1%	11.3%	12.1%	13.4%
Russell 1000 Value	-15.9%	-5.6%	-11.7%	5.8%	5.5%	7.8%

Equity Markets - Valuation

Equity markets are generally undervalued relative to historical averages.

The S&P 500's forward P/E multiple has compressed from 21.5x at the beginning of 2022 to 15.4x today (modestly below historical averages).

International markets are trading 10%-15% below historical averages, which would suggest that they are relatively cheap at first glance.

However, confidence in forward earnings is much lower than normal given the backdrop of rising interest rates, inflation, geopolitical tensions, and higher potential for a recession.

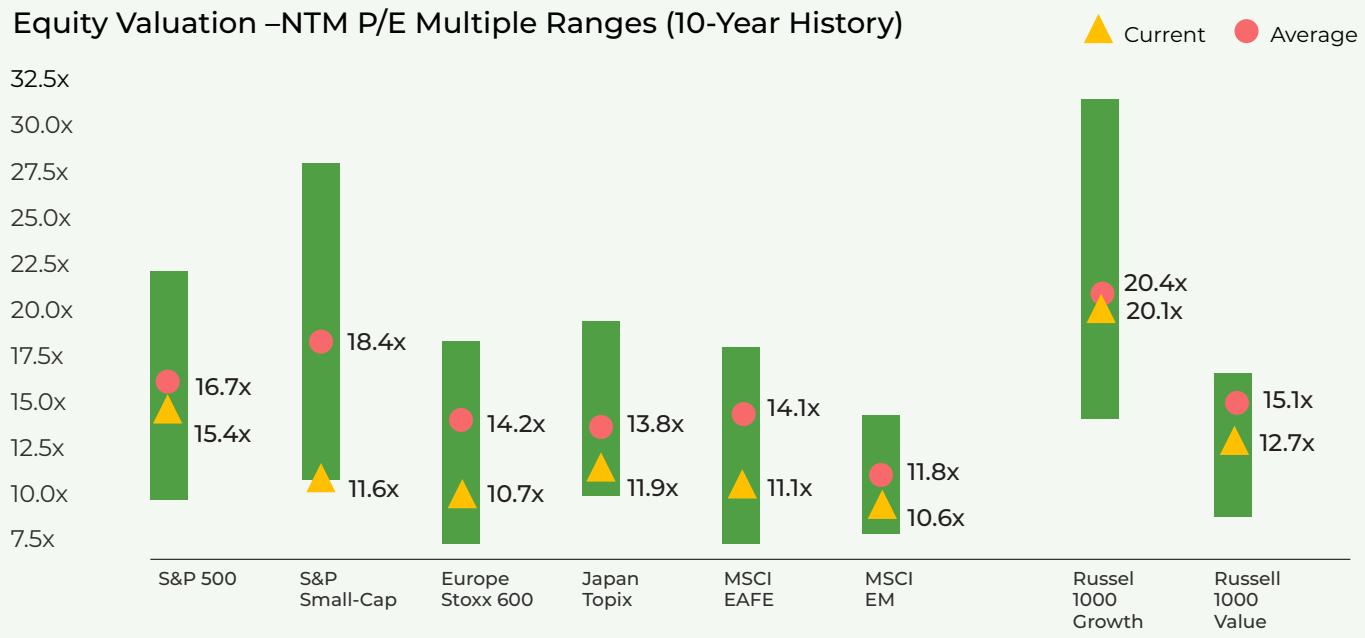
Earnings variability is much higher than normal, especially for international markets.

Finally, much of the earnings growth in international markets (especially developed international markets) in 2022 has been driven by energy and commodity sectors, which tend to trade at lower multiples.

Equity market valuations are no longer cheap compared to bonds.

The S&P 500 presently trades at 15.8x consensus NTM earnings (which are likely too high).

Historically, the S&P 500 earnings yield (inverse of multiple) has averaged 250-350bps over 10-Year Treasuries. Based on that metric, a 14.0x-16.5x forward EPS multiple is "fair" for the S&P 500.



Fixed Income Markets - Performance

Safe fixed income (government bonds and corporate investment grade bonds) declined further in Q3 due to rising interest rates and modestly widening credit spreads.

Persistently higher inflation levels have led to increased hawkishness by major central banks. Central banks have delivered outsized (50bps-75bps) hikes across the US, Canada, England, and Europe. Importantly, they have adopted hawkish rhetoric and signaled intentions for further rate hikes as a tool to return inflation to 2% targets.

Interest rate curves (at short maturities) are now reflecting central bank expectations with interest rates for 1-to-2-year US Treasury bonds increasing by 100-120bps during the quarter.

Risky credit performed better in Q3 as credit spreads remained relatively flat and leveraged loans benefitted from rising interest rates (given their floating nature).

Fixed Income Indices – Characteristics and Performance in USD

(as of 10/7/2022)

	% Ret YTD 2022	% Ret Jun-22 QTR	Annualized Returns 1Y	3Y	5Y	7Y	Duration (yrs)
US Treasury	-13.5%	-4.4%	-13.1%	-3.5%	-0.2%	0.1%	6.2
US Corp. IG	-18.6%	-5.1%	-18.1%	-3.8%	0.0%	1.4%	7.2
US Corp. HY	-13.5%	-0.7%	-12.7%	-0.2%	1.8%	4.1%	4.1
US Corp. Lev. Loans	-2.4%	-1.4%	-1.8%	2.6%	3.1%	3.8%	NA
Barclays US Aggregate	-14.8%	-4.8%	-14.6%	-3.5%	-0.3%	0.4%	6.3
Barclays Canada Agg*	-12.7%	-0.4%	-11.2%	-3.1%	0.4%	0.7%	7.4

** Barclays Canada Aggregate Index returns in CAD*

Fixed Income Markets - Valuation

Safe fixed income (government bonds and investment grade corporate bonds) yields increased substantially during the quarters to levels not seen over the past 15 years.

US Treasuries are yielding roughly 4.2% for 1-to-2-year maturities and 3.9% for 10-year maturities.

US corporate investment grade bonds are now yielding 5.7% (with risk of default very low).

Corporate spreads (investment grade and high yield) have remained relatively consistent since Q2 2022 but have widened significantly for the year.

IG spreads have widened from 115bps at 12/31/21 to 154bps (levels not seen since the end of 2018).

High Yield bond spreads are now at 500bps with yields now near 9.3% (driven by significant base rate increases coupled with spread widening).

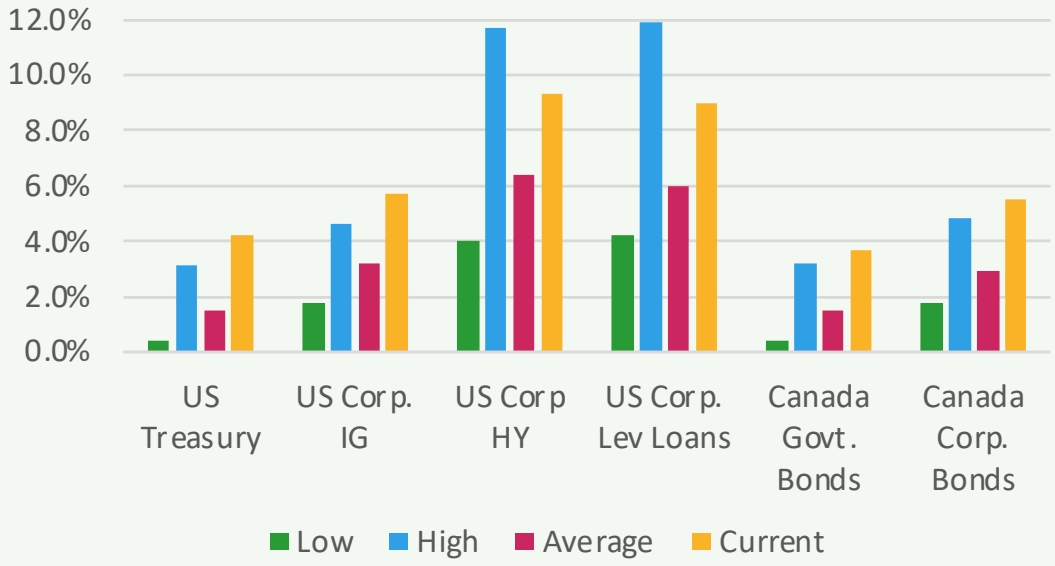
In prior recessions, spreads generally increased to 800bps and briefly reached 1500bps during the GFC.

Credit performance remains generally strong with default rates well below historical levels. However, signs of stress are starting to emerge with default rates and bankruptcy filings increasing (off very low base levels).

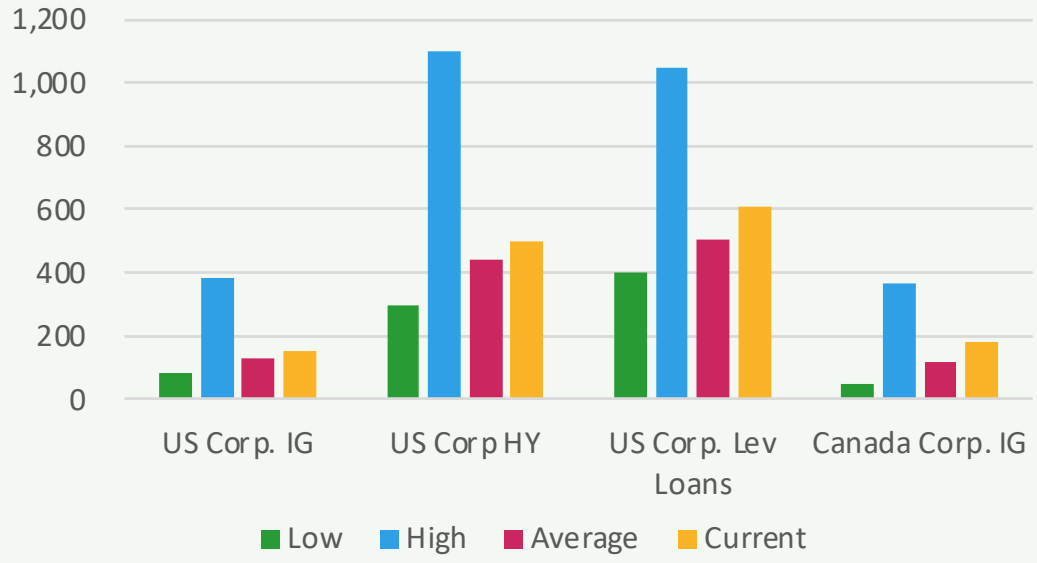
Defaults are likely to increase in 2023 and 2024 as economic growth slows, corporate earnings decline, and companies with weak balance sheets or nearer-term refinancing obligations face capital raising challenges. We expect that the default severity will be lower than that experienced during the GFC.

Fixed Income Markets - Valuation (Continued)

Fixed Income **Yields** – 2-year History



Fixed Income **Spreads** – 10-year History



Alternatives and Private Investments

The HFRX Hedge Fund Index was up 0.5% during Q3 (far better than equity markets).

Global macro and merger arbitrage strategies performed best (+2.7% and +1.2%) while credit and convertible arbitrage strategies performed worst (-1.0% and -1.5%, respectively).

Private real estate fundamentals remain strong (especially in apartment and industrial properties) but are showing signs of moderating growth with rental rate growth having peaked.

Industrial and multi-family properties continue to experience robust rental growth for new leases.

On a YOY basis, rental rates continue to increase in the 10%-15% range. However, in many hot markets, multi-family sequential rents are experiencing slower sequential growth or even sequential declines. For industrial properties, rental growth remains high for in-demand locations with supply constraints.

Cap-rates have risen however, given the sharp increase in debt funding costs.

Multi-family cap-rates have risen from mid 3% levels in US sunbelt cities to roughly 4.25%.

Real estate continues to be an attractive hedge to inflation given the ability for rental resets.

In Q3 2022, the slowdown in private equity deal activity and exits continued.

Rising interest rates have increased funding costs for prospective buyers. Recent public equity valuation compression is leading to a mismatch between private equity buyer and seller expectations.

We expect a period of lower deal volumes and longer-hold periods for existing portfolio companies.

Deals continued for high-quality assets in sectors exhibiting secular growth and less economic volatility.

PE valuations across buyout funds have remained relatively flat to modestly down through Q2 2022. However, it is unclear whether firms will markdown existing portfolio companies in future quarters.

Alternatives and Private Investments (Cont.)

Venture capital funding and deal volumes dropped markedly and exits declined significantly.

Global venture capital funding declined to $81bln in Q3, down $40bln sequentially and $90bln YOY.

Similarly, US venture capital deal value of $43bln was the lowest since Q4 2020 (with deal values lower across all stages).

Exit values dwindled to $14bln in Q3 with the IPO market practically shut. With weak Q4 exits projected, 2022 exit value may be below $100bln for the first time since 2016.

Valuations of existing venture capital portfolio companies continued to decline in Q3.

Valuation compression has been highest in public companies and later-stage private rounds and less pronounced for early-stage companies.

Actionable Investment Opportunities

For the first time in several years, "safe" fixed income is offering attractive absolute yield levels.

US and Canadian Treasury bonds are now yielding north of 4% (for short maturities of 1-3 years).

Investments in shorter-duration Treasury / government bonds can also serve as cash substitutes for funds held in anticipation of other higher-return investments or other needs in this window.

Similarly, investment grade corporate bonds are now offering 5.7% yields to maturity.

Investments in products such as Invesco Bulletshares corporate bond ETFs (maturing in 2024 or 2025) should lock in returns close to 5.0% if held to maturity.

Riskier credit is also interesting (both in the public markets and across private strategies).

Leveraged loans and high yield bonds are becoming increasingly attractive for those investors with longer time horizons, and who are able to tolerate mark-to-market volatility.

We project 7-year annualized high-yield bond returns of 8% (attractive vs. equities on a risk-adjusted basis). However, high-yield bond spreads are likely to widen further in a recession. As such, investors with a shorter-term time horizon may find more attractive entry points over the next 6-12 months.

Certain esoteric parts of the market (high-yield structured finance) are now yielding high-single digits to low-teens with very limited risk of permanent losses (the securities could certainly have mark-to-market volatility).

European credit markets (both public and private) are currently highly dislocated.

Private credit strategies are also highly appealing (offering potential returns from low double-digits to mid-to-high teens).

Private direct lenders are increasingly taking share from traditional syndicated markets. With syndicated leveraged loan new issuance volumes declining (due to recessionary fears), private lenders should be able to increase pricing and demand better covenant protection.

Opportunistic credit funds should benefit from a wider range of higher-returning potential investments including a) dislocated publicly-traded bonds and loans and b) opportunities to provide bespoke bi-laterally negotiated credit solutions such as rescue financing or balance sheet restructuring to corporations.

Venture debt is increasingly interesting as the borrower universe has expanded (larger, more-established borrowers), expected yields have increased, and terms have become tighter and stricter. The loans also have an attractive amortization component which leads to an attractive de-risking element.

Actionable Investment Opportunities (Cont.)

New allocations to private equity are also becoming more interesting (especially across certain segments).

The secondary market is likely to yield attractive opportunities later this year. Several institutions are overallocated to PE and Venture Capital versus their Investment Policy Statements (as a result of the decline in public equities and fixed income). As such, these institutions are likely to sell portions of their private holdings through the secondary market.

The significant public market valuation declines for high-growth companies should filter through to private growth equity and venture markets, resulting in more attractive investment opportunities in funds currently raising capital.

Historically, private equity vintages launched in or just after recessionary periods have exhibited the highest returns over time.