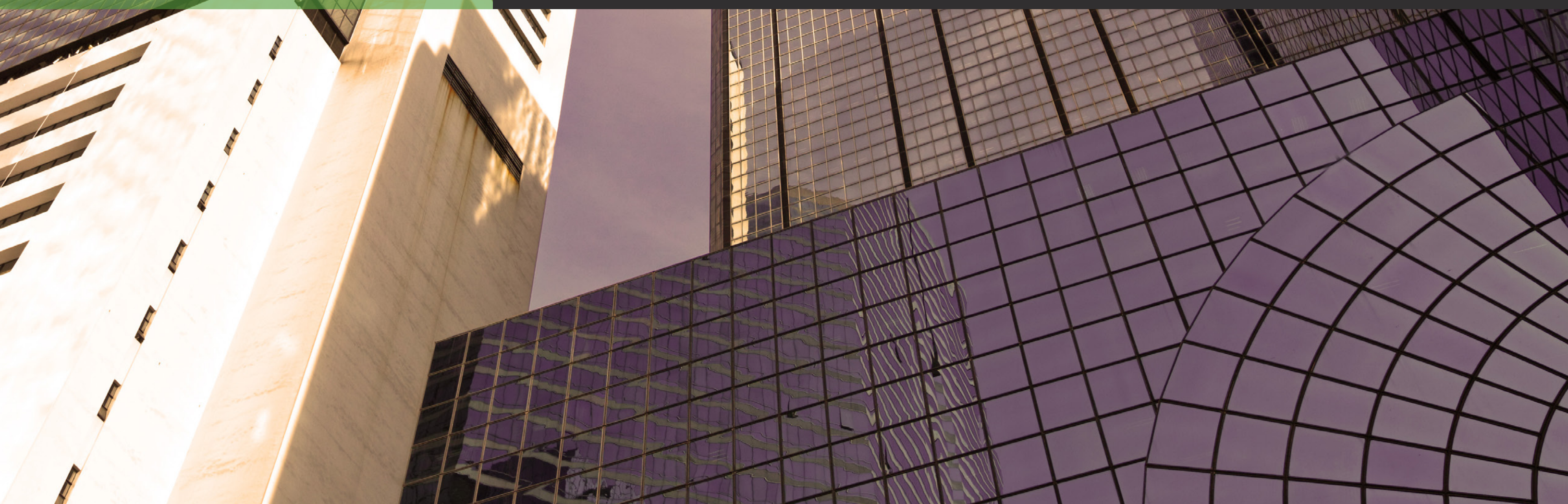
Bitterroot
CAPITAL ADVISORS

Q2 2023 Capital Markets Review

July 19, 2023



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Executive Summary

Capital Markets Review

Capital Markets

Equity markets (ACWI Index) appreciated a robust 6.2% in Q2 and have rallied further since, with YTD gains of 16.7% through July 14, 2023. Global equities are now only 4.5% below 2021 highs.

US stocks (+8.6% in Q2 and +18.1% YTD) rallied the most benefitting from a) optimism in large-cap tech companies surrounding generative artificial intelligence (AI) and its potential effect on the technology ecosystem, especially following Nvidia's impressive results and guidance towards the end of May, b) continued deceleration in headline and core inflation with especially noticeable declines in June inflation data, c) positive economic data surprises relative to expectations with strong consumer spending and employment data, and d) stabilization of the regional banking crisis that occurred in March.

S&P 500 equity valuations are elevated relative to history and investors are incorporating optimistic outlooks with regards to a soft landing, slowdown in inflation, and corporate earnings trajectory.

International equities performance was more muted as European economies slowed further and China's post-COVID recovery appeared to stall in Q2. In USD terms, International developed stocks were up 3.0% in Q2 and 14.7% YTD. Emerging market equities were up 0.9% in Q2 and 9.4% YTD.

US Government and investment-grade corporate bonds modestly declined in Q2 as interest rates rose during the quarter following the abatement of the US regional bank crisis and better than expected economic data.

The Barclays US Aggregate Index was down 0.8% during Q2 with Treasuries down 1.4% and IG-bonds down 0.3%. The Aggregate Index is up 2.3% YTD.

High-yield bonds and leveraged loans (riskier corporate credit) were up 1.8% and 3.2% during Q2 and are now up 6.4% and 7.5% YTD.

Both high-yield bonds and leveraged loans benefitted from high current yields (especially leveraged loans) and from spread tightening.

Spreads have tightened despite emerging signs of credit stress (corporate bankruptcies reaching the highest levels YTD since the GFC). In fact, high-yield bond spreads of 380bps are now below historical averages (430bps) and are well-below the 800bps level normally seen during recessions.

Capital Markets (Continued)

Hedge funds were up 0.7% both in Q2 and YTD.

Equity hedge, credit, and global macro strategies performed best in Q2 (+2.1%, +1.3% and +2.8%) while merger arbitrage and event driven strategies performed worst (-1.8% and -2.8%).

Private equity proved resilient in 2022 and has likely experienced modest uplifts YTD in 2023.

Private equity managers report with a 90-to-120-day lag. As such, Q1 benchmark data is not yet available. Anecdotally, most PE firms are reporting increases of low-SD during Q1 with further modest appreciation likely in Q2.

New deal activity across buyout and growth equity strategies remains muted. However, valuation multiples have modestly contracted, and buyer / seller expectations are beginning to converge.

Private credit performed well through Q1 2023 (latest data available given lagged reporting)

The Cliffwater Private Credit Index was up 2.7% in Q1 as portfolios benefitted from high current yields with stable pricing.

The near-term outlook for existing funds is relatively positive. Increases in SOFR base rates has led to unlevered current yields of north of 10%. However, defaults and markdowns may increase and offset some of this return.

Private real estate pricing continued to decline in Q1 2023 although transaction volumes remain exceedingly low.

The NCREIF Index was down 1.8% in Q1 2023 (second consecutive quarterly decline). Cap-rates have continued to modestly increase.

Underlying property fundamentals remain strong across industrial properties but have stagnated for multi-family properties (although rents have increased recently after falling 5%+ from fall 2022 peak levels). Office fundamentals are generally under significant pressure except for the highest-quality, best location properties.

The outlook for new private investment funds (currently raising money for 2023 vintage) is bright as valuations and leverage utilized in deals are both lower, and in certain cases like private credit, there is less capital chasing opportunities.

We are incorporating these views into portfolio positioning by:

- Cash management via allocation to short-term US Treasuries and US investment-grade bonds
- Continued allocations to new private strategies especially private equity secondaries.

Strategic Asset Allocation View (7-years)

We consider the following factors when developing our 7-year forecasts.

Interest rates are likely to decline from current levels but will remain at higher levels for longer versus the past ten-year average.

Labor shortages persist in service-oriented industries and may constrain margin expansion.

Energy prices are likely to be higher vs. the prior cycle given structural supply shortages.

Geopolitical uncertainty is increasing with regards to the US-China relationship and potential for episodic military conflicts.

With equity valuations having increased materially during H1 2023, we expect mid-to-high single digit nominal pre-tax annual equity returns (6.5%-7.5%) over a seven-year forecast period.

We continue to anticipate greater convergence between US and International equity market returns.

While we expect quality and growth stocks to outperform value stocks over the forecast period, the rate of outperformance is likely to be lower than in recent years.

Equity market valuations are generally fair (for international markets) to modestly overvalued (US).

As such, expected returns are likely driven by earnings growth and dividends rather than multiple expansion.

Potential wildcards (especially for tech-oriented US markets) include adoption pace surrounding generative AI and the resultant potential for above-trend revenue growth and margin expansion.

“Safe” fixed income remains attractive, especially for shorter-term maturities

US and Canadian 1-year government bond yields are yielding 5.2% to 5.3% and 2-year government bonds are yielding 4.6%-4.8%.

We still expect mid-single digit returns for US government debt and investment grade bonds over the forecast period.

On a risk-adjusted pre-tax basis, safe fixed income is still attractive relative to equities.

Strategic Asset Allocation View (7-years)

Riskier credit assets (high-yield bonds and leveraged loans) are somewhat attractive over a mid-term time frame (and on a relative basis to equities)

US high-yield bonds are now yielding 8.2% with 7-year forecasted annual returns of 6.5% (relatively close to US Equities). Leveraged loans are currently yielding 10.4% (based on 3-year takeout convention) with expected mid-term annualized returns in the 7.0% range.

However, on a nearer-term basis (next 12 months), high yield bonds and leveraged loans may experience declines and heightened volatility if credit spreads widen further were a deeper than expected recession to occur.

For new private market strategies (i.e., private equity, private credit, real asset funds), we continue to forecast higher returns relative to public markets (over a multi-year timeframe).

Asset Class: Strategic Outlook (7-Year Timeframe)

	Negative --- Neutral -- Positive	Average Annual Return
EQUITIES		
US Large Cap (S&P 500)		Mid-to-Upper-Mid SD
US Small Cap (Russell 2000)		Mid-to-Upper-Mid SD
MSCI Europe		Mid-to-Upper-Mid SD
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		Mid-to-Upper-Mid SD
US Corp Levered Loans		
ALTERNATIVES, PRIVATE EQUITY, & REAL ESTATE		
Real Estate (Private) - Unlevered		Mid Single Digit
Alternatives (Hedge Funds)		Mid Single Digit
Private Credit (New Funds)		Low DD – Low Teens
Private Equity (New Funds)		Mid-Teens

Inflation and Labor Markets

Inflation has clearly peaked in most major regions. However, how quickly core inflation subsides towards central bank targets is still an open question and the subject of much debate.

In the US, headline inflation has declined significantly from peaks while core inflation has declined at a slower pace.

On a YOY basis, US headline CPI growth declined to 3.0% in June 2023 vs. the 9.1% peak experienced in June 2022. On a MOM basis, US headline CPI increased by 0.1%.

The sharp declines in headline CPI have primarily been driven by sharply lower food and energy costs. The decline in energy prices may prove transitory as oil prices may surge as the summer months and peak driving season nears.

Encouragingly, core CPI inflation is also beginning to decline at a faster pace. Core CPI increased by 4.8% YOY in June 2023 (down from a 6.6% peak in September 2022) and 0.2% MOM (down from 0.4% increases in previous months).

Services inflation declined to 6.3% YOY and 0.3% MOM. However, these figures are artificially increased by shelter costs (lagging indicator as these do not reflect current new rental leases).

Excluding housing, services inflation slowed to 4.0% YOY and was flat MOM.

Additionally, producer prices paid data has also proved encouraging with increases at only 0.1% MOM and 2.6% YOY in June.

In Europe, headline inflation has declined significantly while core inflation remains high.

Headline CPI has declined to 5.5% YOY in June (down from 10.7% peak in October) but Core CPI remains high at 5.4% YOY (vs. a 5.7% March 2023 peak). On a MOM basis, core CPI came in at 0.3%.

Canada's inflation data is trending positively.

Headline CPI declined to 2.8% YOY in June 2023 (down from 8.1% peak in June 2022). Core CPI declined to a lower-than-expected 3.2% YOY and 0.1% MOM (for the second straight month).

Labor markets are still healthy in the US and Canada but are showing signs of loosening.

The US added 209K jobs in June, down from the 306K added in May. Over the past five months, the US has added an average of 240K jobs monthly.

However, unfilled job vacancies have remained under 10 million for three out of the past four months (well below peaks of 12 million in February 2022). Additionally, monthly quit rates of 2.6% are closer to the lower pre-pandemic averages.

Inflation and Labor Markets (Continued)

Businesses are increasingly citing improved conditions surrounding labor availability.

Wage growth declined to 4.4% YOY and 0.4% MOM. This level is still above the 3%-3.5% level the Fed deems necessary to achieve 2% annual inflation overall.

Canada's employment market remains robust with 60K jobs added in June.   The unemployment rate ticked up to 5.4% from 5.0% early in the year due to increased labor market participation.

Macroeconomic Conditions

Thus far, US economic growth has held up much better than expected with support driven by strong consumer spending. However, manufacturing data continues to be weak. It also remains to be seen whether there will be any significant slowdown in regional bank lending.

Q1 Real GDP annualized growth was upwardly revised to 2.0% with consumer spending accelerating to a higher than expected 4.2%. Q2 data also appears strong with GDP growth of 2.4% forecasted by the Atlanta FedNow models.

Core US retail sales growth surged to 0.6% MOM In June as consumers continue to spend down excess pandemic savings (estimated now at $500bln vs. $2 trillion at peak) and increase credit card borrowings.

However, credit card and auto loan delinquency is steadily increasing especially for lower-income consumers.

Manufacturing remains weak with the ISM Manufacturing index continuing to show contracting activity (the index had been below 50 for the past 8 months). The June reading of 46 was the slowest yet with new orders continuing to decline.

The regional banking situation seems to have stabilized over the past few months.

For many banks, deposits are either stabilizing or have increased sequentially (as the banks have raised deposit rates) and lending does not seem to have significantly slowed. However, this is clearly a fluid situation to be monitored over the next several months.

The much-predicted recession in the US has yet to occur. Analysts are now pushing back the timetable and view a mild recession occurring in 2024 as the likely base case.

Additionally, a series of rolling recessions that affect different sectors at different times seems more likely than a broad-based recession. For instance, semiconductors, goods manufacturers, and enterprise spending have already experienced pullbacks in demand (exacerbated by normalization of supply).

These sectors may recover as inventories need to be rebuilt even if end demand were to slow. The housing market appears to be recovering from trough levels as mortgage rates have stabilized. On the other hand, consumer end markets may pull back in 2024 if consumers retrench their spending levels.

Macroeconomic Conditions (Continued)

Canada experienced strong GDP growth in H1 but is likely to experience slowing in H2.

Consumption has remained very strong and has been helped by a surge in immigration.

However, rising household debt service costs are likely to diminish consumer spending over the next several quarters.

Europe's growth has stagnated with flat to slightly negative GDP growth in Q4 2022 and Q1 2023. Leading indicators are turning more negative, but headline inflation is rapidly falling.

Manufacturing PMIs continue to deteriorate and the June reading of 43.4 is the lowest over the past year. Offsetting this, services PMIs continue to remain strong.

The fading recovery in China has presented a challenge for European exports (that may reverse if China enacts meaningful stimulus measures in H2 2023).

Bank lending growth has slowed sharply YTD and is forecast at 2.0% for the full year, a sharp decline vs. the 5.0% growth experienced in 2022.

China's nascent post-COVID recovery is beginning to stall. Additional stimulus measures are necessary to reignite growth to meet official targets.

China's GDP increased sequentially by a lower-than-expected 0.8% in Q2 following a better-than-expected 2.2% sequential increase in Q1.

Exports fell 12.4% YOY in June (the largest decline in three years) following May's 7.5% YOY decline. The decline was driven by a weakening global economy and a widespread paring of inventories.

Retail sales growth grew 3.1% YOY in June following a 12.7% jump in May. Consumers are wary of large-ticket purchases as the embattled housing market and property development sectors remain stressed.

Government stimulus is expected to increase in H2 2023 which should help reinvigorate growth. However, the stimulus is likely to be well smaller than deployed immediately post-GFC and during 2016, given current concerns around China's high debt levels.

Shorter-term View

Thus far in 2023, equity markets have rallied strongly with good news celebrated and potential areas of concern dismissed. The trajectory of equity markets over the next 6-12 months will be driven by a) outlook for corporate earnings and potential for recession and b) trajectory of inflation and interest rates.

The case for a soft-landing or Goldilocks like pause in growth with falling inflation has increased. Inflation has clearly slowed in most major regions, and core inflation is falling significantly in the US (when shelter costs are excluded). It is widely expected that the Fed is close to ending its rate hike campaign. However, it is unclear how quickly the Fed will begin to cut rates.

Thus far, continued strong US consumer spending has defied economists' projections. Consumers still appear to have $500 billion in excess pandemic savings and are willing to take on increasing levels of debt (bolstered by strong employment prospects). US unemployment remains exceedingly low at 3.6%.

Equity markets may continue to appreciate in a scenario where unemployment remains low and inflation continues to fall.

However, investors appear complacent regarding several risk factors.

Manufacturing PMIs in the US and Europe have been in contractionary territory for several months and survey data is worsening. Historically, weakening manufacturing new order survey data has presaged recessions and earnings have subsequently declined 10%-20% from peak levels.

The US Treasury yield curve (10-year vs. 3 months) has been inverted for the past eight months. This yield curve inversion has preceded every recession over the past 50 years, with an average time from inversion to recession of 11 months (not every yield curve inversion has resulted in recession).

Rising interest rates have led to tightening underwriting standards across loan types and less willingness to make consumer and commercial loans. Consumer loan demand remains strong while commercial and industrial loan demand has fallen. Historically, when credit creation and money supply growth has slowed significantly, recession has followed.

Retail investor sentiment indexes have reached highly bullish levels. Presently, investors are the most bullish since April 2021. In many cases, these sentiment indexes serve as contrarian indicators. As such, this highly bullish sentiment may foreshadow future equity market declines over the next 6-12 months.

Shorter-term View (Continued)

We see multiple potential paths for equity returns over the next 6-12 months (with reference to the S&P 500 which stands at 4,505 of July 14, 2023).

Scenario A: (Optimistic Case) – Inflation continues to moderate faster than expected with a soft landing. Fed pauses rate hikes by July and cuts rates beginning in 2024.

Under this scenario, S&P earnings could expand to $240 in 2024 and $260 for 2025 (vs. $218 in 2023). If inflation declines and the Fed cuts rates beginning in 2024, equity multiples may remain at high-teens levels. The S&P 500 index could appreciate from circa 4,500 levels today to 4,800 to 5,100 within 12 months.

Equity markets have already reached the high-end of our previous optimistic scenario (4,200-4,500 YE 2023 target)

Scenario B: (Base Case) – Mild recession emerges in 2024. Fed hikes once more in July but maintains high rates well into 2024.

Under this scenario, The Fed hikes once more in July followed by a pause in rates for 9-12 months followed by rate cuts. The US economy enters a mild recession with 2024 S&P 500 corporate earnings flat to down 7% followed by a strong recovery to $235 to 250 in 2025.

In this scenario, the market may decline to 3,900-4,300 over the next 6-12 months.

Scenario C: (Pessimistic Case) – Core inflation reaccelerates or remains higher for longer leading to more than one Fed hike. Consumers exhaust remaining excess savings and layoffs intensify. European weakness may exacerbate the swiftness of a global recession. This scenario leads to faster and deeper equity market declines followed by a sharp rebound once Fed policy pivots.

Under this scenario, S&P 500 earnings may decline 10%-15% in 2024 with equity markets declining by 15%-20% from current levels over the next 6-12 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.

At this stage, outcomes remain highly uncertain and may be influenced by several external variables that are difficult to predict.

Given the sharp increase in equity valuations YTD coupled with significant remaining macroeconomic risk factors, we would recommend that investors do not add substantially to equities until there is a 10%+ equity market pullback.

Equity Markets – Performance

Equity markets (MSCI ACWI Index) appreciated by 6.2% during Q2 with YTD gains of 16.3% through July 14th.

During Q2, US stocks (+8.6%) materially outperformed international developed stocks (+3.0%) and emerging markets stocks (+0.9%).

Globally, growth stocks (+9.2%) materially outperformed value stocks (+3.0%) during Q2. YTD, growth stocks are up 27.3% while value stocks are only up 5.9%.

Technology (+13.7%) and consumer discretionary stocks (+8.2%) outperformed meaningfully during Q2 and YTD.

Defensive sectors such as utilities, consumer staples and healthcare continued their underperformance during Q2 (-0.1% to +2.3%) and YTD (flat to +4.7%).

Cyclical sectors posted mixed performance during Q2 with financials and industrial sectors performing relatively well (+5.2% and +6.3%) while materials and energy sectors faltered (-0.8% and +0.8%).

US large-cap equities (S&P 500) were up 8.6% during Q2 and 18.1% YTD.

Large-cap technology, internet, and certain consumer discretionary (Tesla) stocks continued to outperform during Q2. These sectors benefitted from investors heightened focus on perceived beneficiaries of AI trends coupled with better than anticipated Q1 earnings and rest of the year guidance.

The Nasdaq and Russell 1000 Growth Index are up 43.0% and 31.7% YTD. Several mega cap tech names that are perceived beneficiaries from AI are up over 50% with Nvidia up 212%.

Nvidia shocked the market on April 25th with a strong earnings forecast and an unprecedented guidance raise (the company increased it's Q2 revenue guidance from $7bln to $11bln driven by strong spending for its AI-oriented semiconductors). Since that date, both the broader technology sector (+17.9%) and the semiconductor sub-sector have appreciated substantially (+30.2%).

AI appears to have immense potential as the next technological revolution. The use of generative AI is increasing quickly, and its effects on growth and productivity may occur much faster relative to previous technological revolutions such as the internet.

In an upside case scenario, Goldman Sachs forecasted that AI could lift labor productivity growth by 1.5% over the next decade and boost corporate profit margins by 400bps over that time frame.

Equity Markets - Performance (Continued)

Likely beneficiaries include specialized chipmakers, cloud storage providers, as well as software tools developers.

Nevertheless, identifying winners and losers from AI is far from clear cut and the ultimate effect on corporate earnings (both across the technology sector and more broadly across the market) is highly uncertain.

Encouragingly, the US stock rally has broadened to other sectors and even to smaller capitalization stocks since the end of May.

The equal-weighted S&P 500 and Russell 2000 Small-Cap indexes were up 4.0% and 5.2% during Q2 vs. 8.6% for the S&P 500 market-cap weighted index. YTD, the equal-weighted and small-cap indexes are up 8.7% and 10.6% respectively, with most of those gains occurring during June and July.

The broadening of the rally to other sectors outside of technology was driven by abating recessionary fears as economic data surprised to the upside and inflation declined faster than expected in June.

International developed stocks (MSCI EAFE) were up 3.0% during Q2 and 14.7% YTD.

The rally in European stocks stalled modestly during the quarter with European equities up 2.8% in USD.

On the one hand, Q1 earnings came in better than expected. However, economic conditions began to slow during Q2 and China's post-COVID recovery (Europe is a large exporter to China) slowed sharply as well.

Japanese equities appreciated by 6.4% in USD and 15.7% in local currency. Japanese equities benefitted from a combination of equity buying by pension plans and the central bank, increasing focus on corporate profit improvement, continued weakness in the Yen vs. other major currencies, and maintenance of ultra-loose monetary policy (super low interest rates) despite rising inflation.

Equity Markets - Performance (Continued)

Emerging markets were up 0.9% during Q2 and 8.5% YTD.

Chinese equities were down 9.8% during the quarter and retraced much of Q1 gains. The underperformance was driven by a sharp slowdown in China's nascent post-COVID recovery coupled with continued concerns regarding the country's embattled property development sector.

We anticipate that China will increase its stimulus efforts over H2 2023, which could provide uplift to Chinese equities and emerging markets broadly. However, these efforts will likely be piecemeal and not the large infrastructure driven stimulus seen post GFC and during 2016.

In the US and to a large extent international developed markets, Q1 corporate earnings came in far better than expected (S&P 500 earnings declined -2.8% YOY vs. -8.0% expectation). Q2 earnings season is set to begin in earnest over the next few weeks.

Analysts are forecasting a 7.1% YOY earnings decline in Q2 for the S&P 500 (although actual earnings are likely to surprise to the upside which is typically the norm just prior to earnings season).

Confidence with regards to achieving a soft-landing scenario (mild to no earnings decline in 2023 followed by growth in 2024) is increasing. However, several risks factors to corporate earnings remain including a) uncertainty regarding the ultimate lagged effect of cumulative interest rate hikes on US and European economies, b) ability of US consumers to maintain high levels of spending, c) potential for core inflation to remain higher for longer leading to higher peak interest rates and d) geopolitical tensions. As such, major uncertainty remains with regards to H2 2023 and especially 2024 earnings.

On the one hand, the consumer remains strong (especially in the US). Therefore, companies have been able to hold or raise price and thus largely protect or even increase margins in many cases (especially as input costs are moderating). However, it is unclear when consumers' excess pandemic savings will be depleted and whether they will pull back on record-high credit-card borrowings.

On the other hand, enterprise spending has been cautious. Furthermore, monetary policy works with long lags (typically 12-18 months) and several economists believe that a mild earnings recession (7%-15% earnings decline) has merely been postponed rather than avoided.

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 revenue and earnings growth and strong returns on capital.

However, given the massive YTD outperformance of growth stocks (especially technology stocks that have benefitted from AI sentiment), we would not be surprised to see value stocks outperform over the next 6-9 months.

The NASDAQ 100 and Russell 1000 Growth indexes are up 43.0% and 31.7% YTD.

Valuations have now climbed relatively close to pandemic-era highs and well above historical norms. Growth stocks may be susceptible to a 10%-20% pullback should earnings results and forecasts disappoint lofty AI-driven expectations.

Certain value stocks such as financials and energy have performed poorly YTD and valuations appear attractive. Bank stocks have already rebounded 10%-20% following Q2 earnings as fundamentals appear to have stabilized, earnings were better than feared, and valuations were extremely cheap relative to history.

Equity Indices (as of 7/14/23)

Total Returns (%) – USD

	YTD 7/14/2023	June-23 Qtr	Annualized Returns 1Y	3Y	5Y	7Y
US Large Cap (S&P 500)	18.1%	8.6%	20.3%	13.4%	11.3%	12.5%
US Small Cap (Russell 2000)	10.6%	5.2%	14.9%	12.0%	4.1%	8.4%
MSCI EAFE	14.7%	3.0%	26.2%	8.9%	4.8%	6.9%
MSCI Emerging Markets	9.4%	0.9%	9.6%	1.5%	1.6%	5.0%
MSCI ACWI	16.3%	6.2%	20.4%	10.4%	8.1%	9.8%
US Style Factors						
MSCI US Quality	25.0%	11.6%	25.1%	12.7%	13.2%	14.6%
Russell 1000 Growth	31.7%	12.8%	27.7%	12.9%	14.7%	16.7%
Russell 1000 Value	6.0%	4.1%	13.9%	13.9%	7.8%	8.6%

Equity Markets - Valuation

Equity markets are generally fairly valued to modestly overvalued relative to historical averages.

The S&P 500's forward P/E multiple has risen sharply to 19.6x from 17.0x at the beginning of the year (and well above its 10-year and longer-term averages of 17.1x and 16.5x respectively).

International developed markets are trading at 13.4x forward earnings (roughly 7% below historical averages) while emerging markets are trading at 12.4x forward earnings (roughly 5% above historical averages).

In the US, equity market valuations are expensive relative to government bonds.

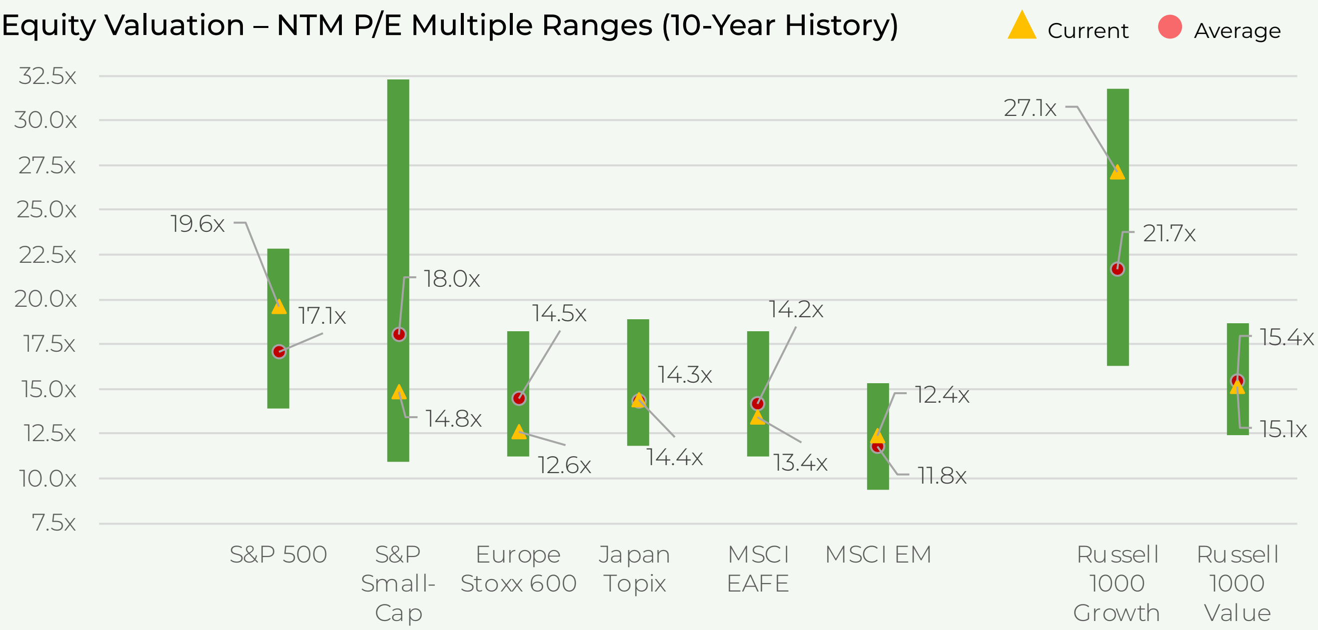
The S&P 500 presently trades at 19.6x consensus NTM earnings (which may be too high)

Historically, the S&P 500 earnings yield (inverse of multiple) has averaged 200-300bps over 10-Year Treasuries.

With 10-year Treasuries yielding 3.8%, a 15x-17x forward EPS multiple is "fair" for the S&P 500.

Additionally, our mid-term return outlook for risky corporate credit (high yield bonds and leveraged loans) is similar to that for equities, with lower risk.

Equity Valuation – NTM P/E Multiple Ranges (10-Year History)



Fixed Income Markets - Performance

Safe fixed income (government bonds and corporate investment grade bonds) declined modestly during Q2 as interest rates increased.

Following a swift fall during March post the SVB crisis, interest rates generally increased as economic activity and job market data surprised to the upside.

2-Year US Treasury yields increased from 4.2% to 4.8% presently and 10-year yields increased from 3.5% to 4.1% briefly before retreating to 3.8% presently.

However, US Inflation has continued to moderate with June headline CPI increasing only 0.1% MOM and 3.0% YOY. Core inflation increased 0.2% MOM and 4.8% YOY, down sharply from its Sept. 2022 6.6% peak.

Both high yield bonds and leveraged loans have appreciated YTD.

Both HY bonds and leveraged loans benefitted from high current income and price appreciation from tightening spreads.

CCC-rated (the riskiest) high-yield bonds have performed best thus far this year (+11.6%) despite bankruptcy filings reaching the highest levels since the GFC.

Fixed Income Indices – Characteristics and Performance in USD (as of 7/14/2023)

	% Ret YTD 7/14/23	% Ret June-23 Qtr.	Annualized Returns 1Y	3Y	5Y	7Y	Duration (yrs)
US Treasury	1.7%	-1.4%	-2.1%	-4.9%	0.4%	-0.1%	6.2
US Corp. IG	3.4%	-0.3%	1.1%	-3.9%	1.6%	1.3%	7.2
US Corp HY	6.4%	1.8%	8.8%	3.0%	3.5%	4.3%	3.5
US Corp Lev. Loans	7.5%	3.2%	11.7%	6.4%	4.3%	4.7%	NA
Barclays US Aggregate	2.3%	-0.8%	-1.0%	-4.1%	0.7%	0.4%	6.3
Barclays Canada Agg. *	1.5%	-0.8%	1.8%	-4.0%	0.5%	0.4%	7.3

** Barclays Canada Aggregate Index returns in CAD*

Fixed Income Markets - Valuation

Safe fixed income (government bonds and investment grade corporate bonds) yields remain at attractive levels

US Treasuries are yielding roughly 4.8%-5.3% for 1-to-2-year maturities and 3.8% for 10-year maturities.

US corporate investment grade bonds are now yielding 5.3% (with risk of default very low).

Investment grade corporate bond spreads have modestly declined YTD while high yield bond spreads have tightened more significantly.

IG spreads are presently at 125bps (vs. 141bps at YE 2022) and HY spreads are at 379bps (vs. 469bps at YE 2022).

HY spreads are at the lowest levels since April 2022.

Spreads have generally widened further during prior recessionary periods (200bps for corporate bonds and 800bps for HY bonds).

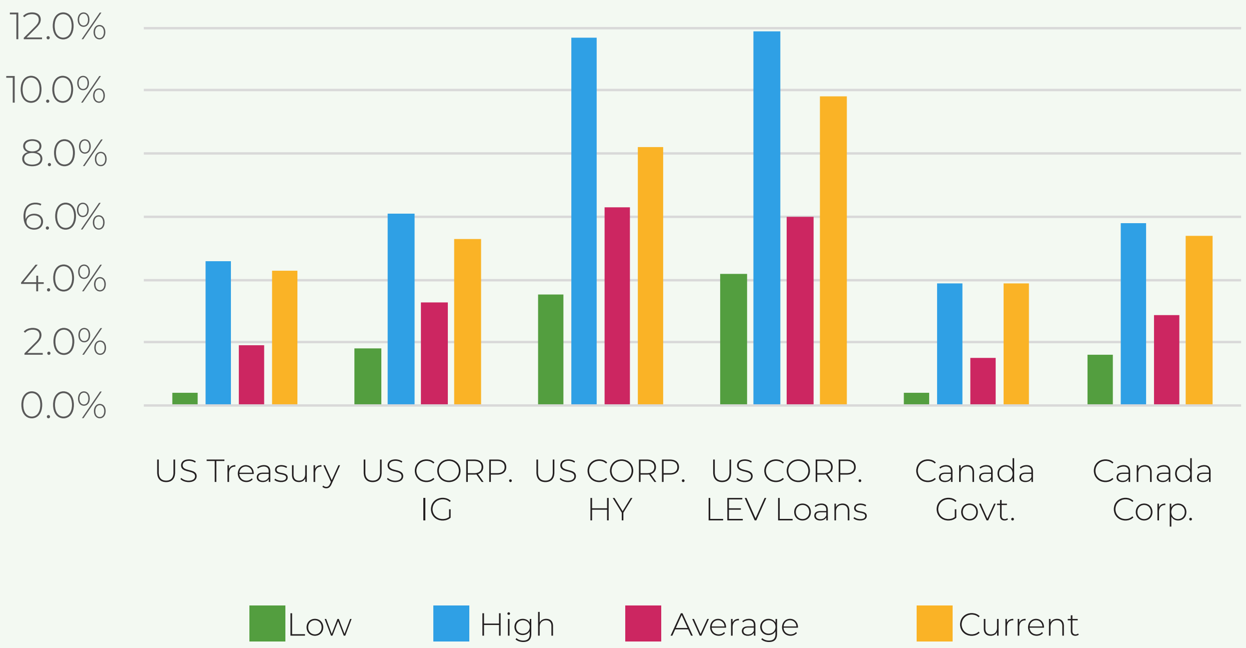
However, the quality of the high yield index is much stronger now than in previous periods. When coupled with today's high base rates, it is unlikely that spreads will widen to those experienced in previous recessions (even if economic activity slows substantially).

Signs of credit stress are increasingly emerging with default rates increasing (off very low base levels) and corporate bankruptcy filings reaching levels not seen since the GFC.

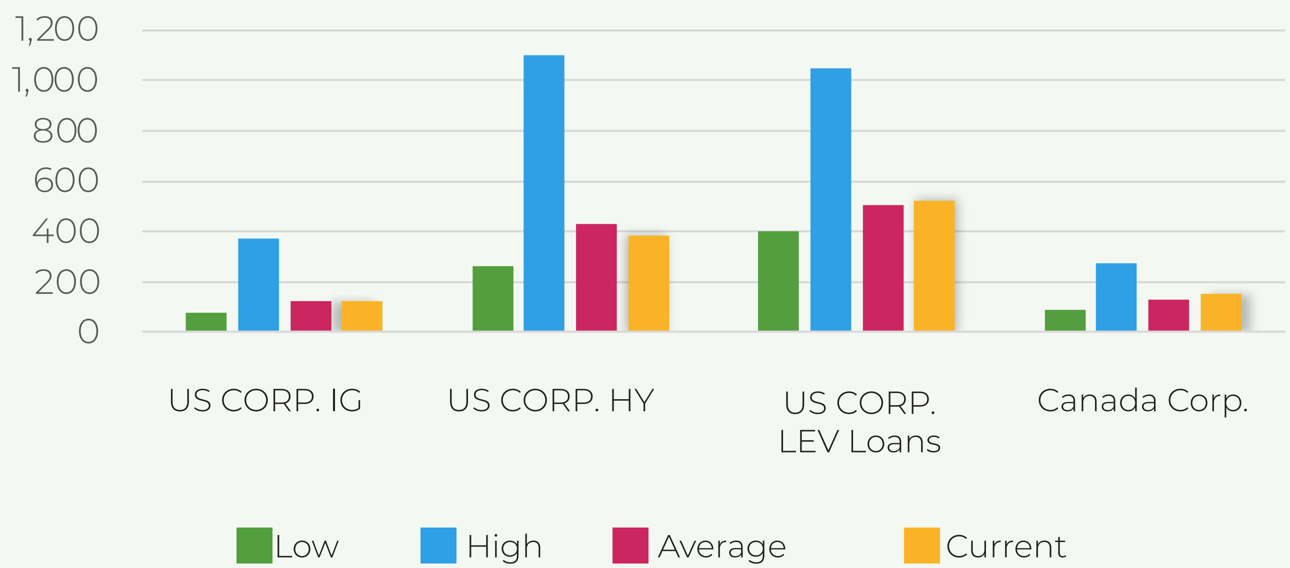
Defaults have increased to 2.0% as of Q2 2023 on a trailing twelve-month basis vs 0.8% as of Q2 2022. S&P is forecasting that default rates will increase to 4.0% by YE 2023 and 8.0% by YE 2024. Thus far, S&P has overestimated the pace of increase in default rates. We continue to expect that the default severity will be lower than that experienced during the GFC.

Fixed Income Markets - Valuation (Continued)

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



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



Alternatives and Private Investments

The HFRX Hedge Fund Index was up 0.7% both in Q2 and YTD.

Equity hedge, credit, and global macro strategies performed best in Q2 (+2.1%, +1.3% and +2.8%) while merger arbitrage and event driven strategies performed worst (-1.8% and -2.8%).

US private real estate operating fundamentals are mixed in terms of operating fundamentals and transaction prices.

Within multi-family apartments, national rent growth has remained relatively flat on a YOY basis during Q2. Sequentially, rents peaked in Aug 2022 and then declined by 5% through February 2023 before rising 4% through June 2023. Rental rates are firming in the South and Midwest while continuing to decline in the Western US.

In-place industrial rents remain strong and have increased 7% YOY in terms of national averages. Importantly, new lease rates remain 20%-25% higher than in-place rents providing multi-year visibility for 5%+ industrial rent growth (given the four-year average lease terms for industrial properties).

Office fundamentals are clearly under pressure with increasing frequency of defaults on debt.

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

In many cases, debt dilutes equity returns as the cost of funding is higher than the cap-rate.

Pricing has continued to decline with the NCREIF index down 1.8% in Q1 2023 (latest data available), following a 3.5% decline in Q4 2022.

Sales volumes remain depressed as cap rates have rose and property valuations have declined. The bid / ask spread remains high.

Refinancing risk is an area to closely monitor as substantial commercial real estate debt matures over the next few years.

The office sector and some pockets of retail are clearly under pressure and may see defaults pick up considerably over the next 18 months.

Alternatives and Private Investments (Cont.)

Private equity performance remained relatively resilient in 2022 (down 4.3%) and has likely delivered positive returns thus far in 2023 (PE reports with 90-120 day lags so Q1 official benchmark data is not available).

PE buyout returns thus far in 2023 are unlikely to match the broader public equity markets as PE held up much better in 2022 and given that most PE buyout exposure is not within the mega-cap technology space (other sectors in the public markets have rallied far less YTD).

US PE buyout deal value declined to roughly $190bln in Q2 down from $220mm in Q1 and well below the $380mm Q4 2021 peak (although in-line with pre-pandemic levels).

Valuations for new deals are beginning to decline with the median deal valuation at 10.5x EBITDA vs. 12.1x EBITDA in 2022. However, valuations for the highest-quality businesses remain robust and have not experienced material declines.

Add-on deals (as opposed to new LBOs) continued to increase their share of overall PE activity and accounted for 78% of total PE deals through H1 2023 vs. 72% in 2021.

Leverage levels on deals have reduced by 1.0x-1.5x turns thus far with debt accounting for 43% of total capitalization vs. 53% at the end of 2021.

Exit activity remains depressed and has been flat to down for seven consecutive quarters since Q3 2021. Exit activity is now below pre-COVID levels.

If exit activity remains depressed, this could lead to a maturity wall for funds raised 10-12 years ago and drive increased levels of secondary activity.

Venture capital funds (pooled returns) delivered a -21% decline in 2022. Given the reporting lag, 2023 performance data is not yet available. However, valuations appear to have stabilized.

Deal count and new deal value has largely stabilized over the past few quarters at pre-pandemic levels (down 50% from 2021 highs).

Exit activity remains anemic with only $12bln in exits through H1 2023.

Down-rounds are finally occurring as some companies face cash funding needs. 14% of completed financings in Q2 were down-rounds and the percentage of down-rounds is likely to increase over the next year.

Actionable Investment Opportunities

Short-term US and Canadian government debt

4.5%-5.0%+ yields to maturity for US and Canadian Treasury bonds (for short maturities of up to two years)

Private Credit (offering potential returns from low double-digits to mid-to-high teens).

Demand for flexible capital solutions (junior credit) is increasing sharply as sponsors are increasingly dependent on M&A acquisitions to drive portfolio company growth and cannot add senior debt (either syndicated or through private direct lenders) to their capitalization stacks. This junior capital can provide 1-2x turns of additional leverage offering mid-teens IRRs through offering flexible payment structures (mix of cash and PIK interest). Additionally, these capital solutions can demand stronger protections in terms of financial and maintenance covenants.

Asset-backed credit solutions are seeing increased demand as companies seeking liquidity are pledging high-quality sources of collateral such as receivables, inventory, and certain fixed assets.

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 (loans to Venture-backed companies) is increasingly interesting, especially post the SVB collapse. 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.

Private Equity Secondaries

Activity in the secondary market has picked up significantly during H1 driven by institutions selling existing LP positions either to a) bring allocations to PE more inline with their targeted ranges or b) facing liquidity issues as distributions are delayed given current market conditions while capital calls are continuing.

Deal volume increased substantially vs H1 2022 and discounts have widened significantly for LP transactions with average deals done in the low-to-mid 80% range of stated NAV vs. low-to-mid-90%s last year.

For the first time in several years, modest discounts are even available for best-in-class GP-led continuation vehicle (single asset) deals.