

THIRD QUARTER 2022

Quarterly Market Commentary

Market Dashboard

Multi-Asset	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Global 60/40 (ACWI/U.S. Core Bonds)	(7.47)	(5.94)	(21.25)	(18.08)
Wilshire Risk Parity Index SM – 12% Volatility	(9.21)	(9.03)	(24.29)	(20.30)

Source: Bloomberg. Indexes are total return.

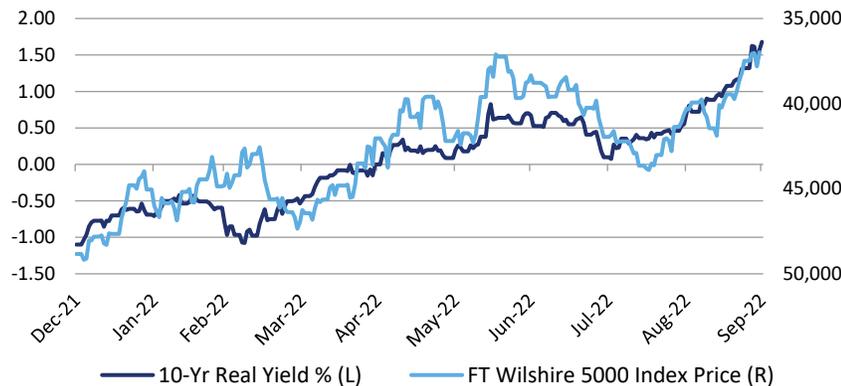
Strategic Allocation Themes	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Growth ¹	(9.57)	(6.82)	(25.63)	(20.66)
Defensive Growth ²	(6.26)	(3.34)	(18.19)	(15.12)
Diversified Credit ³	(4.72)	(2.03)	(17.14)	(16.95)
Real Assets ⁴	(11.42)	(9.14)	(14.42)	(9.38)
Defensive ⁵	(4.32)	(4.75)	(14.61)	(14.60)

Source: Bloomberg. Indexes are total return.

Quarterly Insight

The U.S. equity market is in the midst of one of the worst sell-offs in the past 20 years, ahead of only the global financial crisis and COVID shutdown. Stock indexes produced gains during the first half of the quarter on strong earnings reports, particularly in technology and energy. While earnings have been falling short of expectations this year, they continue to trend higher versus 2021. The rally collapsed, however, after Federal Reserve Chair Jerome Powell stated in August that the Fed would continue to combat inflation in a way that could cause “some pain” for the U.S. economy. Rising rates have been the story of 2022 as investors are now able to capture a positive real return from bonds, which has allowed them to redirect dollars away from riskier assets.

A Liquidity/Rate-Driven Market: Real Yields vs. Stock Prices (inverted)



Source: Bloomberg

Economic highlights

GDP: Real GDP growth contracted during the second quarter, down an annualized -0.6%. This marks the second consecutive negative quarter, which is the common, albeit unofficial, definition of a recession. Declines in residential investment, government spending and business inventories were the root causes. The Atlanta Fed’s GDPNow forecast for the third quarter currently stands at 2.4%.

Source: Bureau of Economic Analysis

Interest Rates: The Treasury curve rose across all maturities during the third quarter with the smallest changes still more than 50 basis points. The 10-year Treasury closed at 3.83%, up 81 basis points since June. The 10-year real yield (i.e., net of inflation) rose 101 basis points to 1.68%. The Federal Open Market Committee increased the fed funds rate by a total of 1.50% this quarter, targeting a range of 3.0% to 3.25%. The committee’s current median outlook is for a rate of approximately 4.4% by the end of 2022.

Source: U.S. Treasury

Inflation: Consumer price changes have moderated, yet remain elevated, as the Consumer Price Index jumped 1.4% for the three months ending August. For the one-year period, the CPI is up 8.2%. The 10-year break-even inflation rate decreased to 2.15% in September versus 2.34% in June.

Source: Dept. of Labor (BLS), U.S. Treasury

Employment: Jobs growth remains solid, with an average of 378k jobs/month added during the three months ending in August. The unemployment rate ticked slightly higher from 3.6% in May to 3.7% in August. The labor force participation rate edged higher to 62.4%, matching the 2022 high, but remains well below pre-COVID levels.

Source: Dept. of Labor (BLS)

Housing: An elevated housing market has cooled significantly during the third quarter. However, prices remained strong through July, with the S&P Case-Shiller 20-City Home Price Index up 1.1% and 16.1%, respectively, for the trailing three- and 12-months.

Source: Standard & Poor’s

U.S. Economy and Markets

The U.S. stock market, represented by the FT Wilshire 5000 IndexSM, was down -4.45% for the third quarter and is now down -24.4% for all of 2022. Most sectors were down for the quarter. The worst performing were Communication Services (-12.5%), Real Estate (-10.9%) and Materials (-6.7%). The two sectors producing gains were Consumer Discretionary (+4.0%) and Energy (+3.6%). From a size perspective, small cap outperformed large by 98 basis points. Growth stocks outperformed value for the quarter but trail meaningfully for the year-to-date.

U.S. Equity	MTD (%)	QTD (%)	YTD (%)	1Y (%)
FT Wilshire 5000 Index SM	(9.34)	(4.45)	(24.41)	(17.17)
Standard & Poor's 500	(9.21)	(4.88)	(23.87)	(15.47)
Wilshire 4500 Completion Index SM	(9.68)	(2.48)	(27.72)	(26.47)
MSCI USA Minimum Volatility	(7.17)	(5.41)	(17.29)	(8.68)

Source: Bloomberg. Indexes are total return.

U.S. Equity by Size/Style	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Wilshire US Large-Cap Index SM	(9.25)	(4.52)	(24.36)	(16.62)
Wilshire US Large-Cap Growth Index SM	(9.77)	(3.27)	(30.07)	(21.99)
Wilshire US Large-Cap Value Index SM	(8.67)	(5.84)	(16.93)	(9.82)
Wilshire US Small-Cap Index SM	(10.21)	(3.54)	(24.62)	(22.14)
Wilshire US Small-Cap Growth Index SM	(9.45)	(2.04)	(28.15)	(26.88)
Wilshire US Small-Cap Value Index SM	(10.89)	(4.86)	(21.07)	(17.27)
Wilshire US Micro-Cap Index SM	(11.36)	(2.77)	(29.54)	(35.43)

Source: Bloomberg. Indexes are total return.

GICS sector returns	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Communication Services	(12.10)	(12.47)	(38.92)	(39.39)
Consumer Discretionary	(8.34)	3.96	(30.79)	(23.11)
Consumer Staples	(8.17)	(6.53)	(12.12)	(1.23)
Energy	(9.37)	3.58	35.52	44.14
Financials	(7.95)	(2.78)	(21.75)	(17.98)
Health Care	(3.12)	(4.64)	(15.49)	(8.35)
Industrials	(10.15)	(3.40)	(21.34)	(15.02)
Information Technology	(11.93)	(5.80)	(32.00)	(22.07)
Materials	(10.99)	(6.67)	(24.26)	(13.38)
Real Estate	(12.79)	(10.91)	(29.27)	(18.85)
Utilities	(11.17)	(5.82)	(6.92)	5.43

Source: Wilshire Atlas. Indexes are total return.

Growth stocks trail value by a large margin for the year

International Economy and Markets

Performance results within international equity markets were negative for the third quarter, with developed outperforming emerging markets. The MSCI EAFE Index was down -9.4% for the quarter, while the MSCI Emerging Markets Index was down -11.6%. In Europe, monetary policy tightening and an energy crisis due, in part, to restricted Russian gas supplies weighed on stocks. In late September, the Bank of England found it necessary to intervene in the bond market after a massive sell-off of UK government bonds, announcing a temporary purchase program of long-dated bonds. China is currently struggling on several fronts – slowing growth, record high youth unemployment and a collapsing housing market. Its zero-COVID policy is arguably making matters worse, as full or partial lockdowns announced in late September will affect approximately 125 million people.

Non-U.S. Equity	MTD (%)	QTD (%)	YTD (%)	1Y (%)
MSCI ACWI	(9.57)	(6.82)	(25.62)	(20.66)
MSCI ACWI ex USA	(10.00)	(9.91)	(26.50)	(25.17)
MSCI ACWI ex USA Minimum Volatility	(7.46)	(7.85)	(19.47)	(17.27)
MSCI EAFE	(9.35)	(9.36)	(27.09)	(25.13)
MSCI Emerging Markets	(11.72)	(11.57)	(27.16)	(28.11)
MSCI ACWI ex USA Small Cap	(11.04)	(8.37)	(29.37)	(28.93)

Source: Bloomberg. Indexes are total return.

Non-U.S. Equity (local currency)	MTD (%)	QTD (%)	YTD (%)	1Y (%)
MSCI ACWI	(8.43)	(4.86)	(21.74)	(16.24)
MSCI ACWI ex USA	(6.99)	(4.85)	(16.18)	(13.93)
MSCI ACWI ex USA Minimum Volatility	(4.84)	(3.53)	(9.45)	(6.55)
MSCI EAFE	(6.21)	(3.59)	(14.46)	(11.11)
MSCI Emerging Markets	(9.38)	(8.18)	(20.75)	(21.47)
MSCI ACWI ex USA Small Cap	(7.47)	(2.71)	(18.24)	(16.86)

Source: Bloomberg. Indexes are total return.

Fixed Income Markets

The U.S. Treasury yield curve was up meaningfully across all maturities during the quarter, with increases ranging from 60 to 165 basis points. The 10-year Treasury yield ended the quarter at 3.83%, up 81 basis points from June. Credit spreads widened during the quarter within investment grade bonds but tightened, slightly, for high yield bonds, after an outsized jump of 163 basis points in June. The Federal Open Market Committee met twice during the quarter, as scheduled, and increased the overnight rate by 0.75% in both July and September, targeting a range of 3.00% to 3.25%. The Fed’s “dot plot” is messaging that the current intent is for another 125 basis points in increases before the end of 2022. Equity markets reacted negatively to Fed Chair Jerome Powell’s “pain” speech in August where he clearly stressed the committee’s current goal of taming inflation.

The Bank of England announced limited bond purchases to prevent “unwarranted” tightening conditions

The FOMC raised the overnight rate 1.50% this quarter; forecasting a rate above 4% by year-end

U.S. Fixed Income	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Bloomberg U.S. Aggregate	(4.32)	(4.75)	(14.61)	(14.60)
Bloomberg Long Term Treasury	(7.90)	(9.63)	(28.84)	(26.65)
Bloomberg Long Term Corporate	(8.74)	(8.65)	(29.43)	(28.40)
Bloomberg U.S. TIPS	(6.62)	(5.14)	(13.61)	(11.57)
Bloomberg U.S. Credit	(5.07)	(4.95)	(18.07)	(17.89)
Bloomberg U.S. Corporate High Yield	(3.97)	(0.65)	(14.74)	(14.14)
S&P/LSTA Leveraged Loan	(2.27)	1.37	(3.25)	(2.53)

Source: Bloomberg. Indexes are total return.

Market Rates	Sept 30	June 30	Mar 31	Dec 31
10-Year Treasury	3.83	3.02	2.34	1.51
10-Year Breakeven Inflation	2.15	2.34	2.83	2.59

Source: Bloomberg. Indexes are total return.

Global Fixed Income	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Bloomberg Global Aggregate	(5.14)	(6.94)	(19.89)	(20.43)
Bloomberg Global Aggregate (Hdg)	(3.21)	(3.34)	(12.09)	(12.05)
Bloomberg EM LC Gov't Universal	(4.24)	(4.40)	(12.89)	(12.58)
Bloomberg EM LC Gov't Universal (Hdg)	(1.07)	0.55	(4.28)	(4.73)

Source: Bloomberg. Indexes are total return.

Real Asset Markets

Real estate securities were down during the third quarter in both the U.S. and abroad. Commodity results also were negative for the quarter, with crude oil falling precipitously by -24.8% to \$79.49 per barrel. Fears of a lasting recession have led to double-digit losses for other commodities, as well. Natural gas prices surged during the quarter, hitting a high not seen in a decade, before trending lower during September. By quarter-end, natural gas was up +24.7%, closing at \$6.77 per million BTUs. Gold prices were down -8.1% during the quarter, finishing at approximately \$1,672 per troy ounce, as the Federal Reserve continued its hawkish stance toward inflation.

Crude oil fell -25% for the quarter while natural gas surged by a similar amount

Real Assets	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Wilshire US Real Estate Securities Index SM	(12.25)	(10.20)	(29.63)	(17.56)
Wilshire Global Real Estate Securities Index SM	(12.54)	(11.20)	(29.39)	(20.13)
FTSE Global Core Infrastructure 50/50	(11.70)	(8.87)	(12.25)	(5.48)
Alerian Midstream Energy	(9.86)	(0.98)	12.13	11.73
Bloomberg Commodity	(8.11)	(4.11)	13.57	11.80
Gold	(2.95)	(8.12)	(9.22)	(5.48)
Bitcoin	(3.82)	3.70	(58.08)	(55.28)

Source: Bloomberg. Indexes are total return.

Alternatives

Liquid alternative managers experienced a volatile quarter, ultimately ending the period down moderately. Similar to the previous quarter, all sub-strategies ended the quarter down, except for global macro which continued to benefit from being largely short fixed income and long the US dollar. Equity hedge managers experienced a strong July, but ultimately ended the quarter down as sentiment shifted negatively from an upside surprise in inflation and an increasingly hawkish Fed, which pulled markets back to June lows. Event-driven managers ended the quarter down as broader market dynamics weighed on returns, despite tightening deal spreads and significant merger volume which provided support throughout most of the quarter. Relative value managers were supported by modest spread tightening in the first two months of the quarter, but gains were lost as markets reversed in August.

Global macro provided diversification through short interest rate positioning and long US dollar exposure

Alternatives	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Wilshire Liquid Alternative Index SM	(2.58)	(1.91)	(7.30)	(6.72)
Wilshire Liquid Alternative Equity Hedge Index SM	(4.43)	(3.54)	(10.82)	(7.82)
Wilshire Liquid Alternative Event Driven Index SM	(1.25)	0.38	(3.74)	(4.08)
Wilshire Liquid Alternative Global Macro Index SM	2.98	3.11	13.26	11.75
Wilshire Liquid Alternative Multi-Strategy Index SM	(2.93)	(2.46)	(8.65)	(7.76)
Wilshire Liquid Alternative Relative Value Index SM	(2.80)	(2.26)	(9.17)	(9.76)

Source: Bloomberg. Indexes are total return.

¹ 100% Global Equity

² 60% Low Vol Global Equity, 40% US Convertibles

³ 42.5% U.S. High Yield, 42.5% EMD, 15% Banks Loans

⁴ 43% Global REITS/GLI, 33% Commodities, 48% TIPS, 9% Gold, -31% Cash

⁵ 100% US Core Bonds

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