

FIRST QUARTER 2022

Quarterly Market Commentary

Market Dashboard

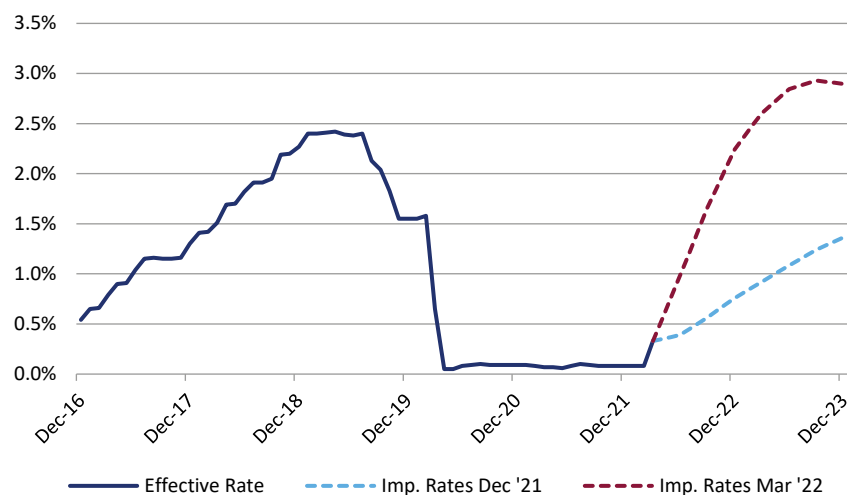
Strategic Allocation Themes	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Growth ¹	2.17	(5.36)	(5.36)	7.28
Defensive Growth ²	2.65	(3.97)	(3.97)	4.24
Diversified Credit ³	(0.86)	(6.35)	(6.35)	(2.98)
Real Assets ⁴	4.58	6.30	6.30	27.46
Defensive ⁵	(2.78)	(5.93)	(5.93)	(4.15)

Source: Bloomberg. Indexes are total return.

Quarterly Insight

Geopolitical events shook the globe during the quarter as Russia invaded neighboring Ukraine on February 24, 2022. While the humanitarian fallout is of greatest importance, it is also necessary to understand the economic and market impacts that stem from these destabilizing events. Perhaps the most important tensions came from accelerating inflationary pressures the Russia/Ukraine conflict imposed on the Federal Reserve. The Fed had already signaled it would soon raise the Fed Funds Rate and inflation for the first two months of the year had already climbed 1.4% (not annualized). The market seemed to quickly understand that the Fed needed to act aggressively throughout 2022 to stave off runaway inflation. The 10-year breakeven inflation rate pushed toward 3% and fed fund futures pricing implied an overnight rate of 2.25% by the end of the year.

Federal Funds Rate: Effective & Futures Implied



Source: Bloomberg

Economic highlights

GDP: Real GDP growth accelerated during the fourth quarter, up an annualized 6.9%. The main drivers of growth were again private investment (up 36.7%) and personal consumption (up 2.5%). Imports continue to rise while exports also increased, the net effect being a slight drag on economic growth of -0.2%. The Atlanta Fed's GDPNow forecast for the first quarter currently stands at 1.3%.

Source: Bureau of Economic Analysis

Interest Rates: The Treasury curve rose across the maturity spectrum during the first quarter, with the short-intermediate section up the most. The 3-year Treasury was up 1.6% while the 10-year closed at 2.34%, up 83 basis points. The 10-year real yield (i.e., net of inflation) rose 61 basis points to -0.49%. The Federal Open Market Committee increased the Fed Funds Rate by 0.25% at its March meeting while increasing the median outlook to 1.875% for year-end 2022.

Source: U.S. Treasury

Inflation: Consumer price changes have accelerated rapidly as the Consumer Price Index jumped 2.0% for the three months ending February. For the one-year period, the CPI is up 7.9%. The 10-year breakeven inflation rate increased to 2.83% in March versus 2.59% in December.

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

Employment: Jobs growth continues to be quite strong, with an average of 562k jobs/month added during the three months ending March. The unemployment rate continued to fall, dropping to 3.6%. Reported job openings remain elevated with a record 1.8 jobs available for every person unemployed.

Source: Dept. of Labor (BLS)

Housing: Low borrowing rates and a shortage of properties have driven home prices to record highs. The S&P Case-Shiller 20-city Home Price Index was up 4.6% and 19.1%, respectively, for the three- and 12-months ending January.

Source: Standard & Poor's

U.S. Economy and Markets

The U.S. stock market, represented by the FT Wilshire 5000 IndexSM, was down -4.95% for the first quarter of 2022. Sector performance was mixed as Energy (+39.0%) and Utilities (+4.8%) were up, supported by surging commodities prices. The worst performing sectors this quarter were Communication Services (-11.9%), Consumer Discretionary (-9.0%) and Technology (-8.4%). From a size perspective, large-cap outperformed small-cap, although both segments were down. Growth stocks underperformed value in both the large-cap and small-cap segments during the quarter.

U.S. Equity	MTD (%)	QTD (%)	YTD (%)	1Y (%)
FT Wilshire 5000 Index SM	3.35	(4.95)	(4.95)	13.09
Standard & Poor's 500	3.71	(4.60)	(4.60)	15.65
Wilshire 4500 Completion Index SM	1.26	(7.49)	(7.49)	(1.25)
MSCI USA Minimum Volatility	5.49	(3.76)	(3.76)	13.82

Source: Bloomberg. Indexes are total return.

U.S. Equity by Size/Style	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Wilshire US Large-Cap Index SM	3.53	(4.83)	(4.83)	14.65
Wilshire US Large-Cap Growth Index SM	4.17	(7.96)	(7.96)	16.32
Wilshire US Large-Cap Value Index SM	2.78	(0.69)	(0.69)	12.63
Wilshire US Small-Cap Index SM	1.32	(6.11)	(6.11)	(1.44)
Wilshire US Small-Cap Growth Index SM	0.05	(10.35)	(10.35)	(9.42)
Wilshire US Small-Cap Value Index SM	2.51	(1.84)	(1.84)	7.32
Wilshire US Micro-Cap Index SM	1.23	(9.07)	(9.07)	(18.15)

Source: Bloomberg. Indexes are total return.

GICS sector returns	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Communication Services	1.0	(11.9)	(11.9)	(0.9)
Consumer Discretionary	4.9	(9.0)	(9.0)	9.8
Consumer Staples	1.8	(1.0)	(1.0)	16.1
Energy	9.0	39.0	39.0	64.3
Financials	(0.2)	(1.5)	(1.5)	14.7
Health Care	5.6	(2.6)	(2.6)	19.1
Industrials	3.4	(2.4)	(2.4)	6.1
Information Technology	3.5	(8.4)	(8.4)	20.9
Materials	6.1	(2.4)	(2.4)	13.9
Real Estate	7.8	(6.2)	(6.2)	25.8
Utilities	10.4	4.8	4.8	19.9

Source: Bloomberg. Indexes are total return.

Energy sector was up 39.0% this quarter as commodity prices surged

International Economy and Markets

Performance results within international equity markets were mostly negative for the first quarter of 2022, with both developed and emerging markets producing losses. The MSCI EAFE Index was down -5.9% while the MSCI Emerging Markets Index was down -7.0%. Within developed markets, however, there were some bright spots as the Australian and UK equity markets were positive. The UK economy surged in January and is now back above the level that existed before the COVID pandemic. The largest emerging equity markets were down for the quarter, with China suffering a double-digit loss. An escalating COVID outbreak in China has led to some local lockdowns and is cutting into economic growth forecasts. Russia’s invasion of Ukraine led MSCI to reclassify the Russian equity market from Emerging to a Standalone Market since Russian equities are currently uninvestable. The decision was implemented across all MSCI indexes as of March 9, 2022 at a price that is effectively zero.

MSCI reclassified Russia as a Standalone Market, removing those equities from all indexes

Non-U.S. Equity	MTD (%)	QTD (%)	YTD (%)	1Y (%)
MSCI ACWI	2.17	(5.36)	(5.36)	7.28
MSCI ACWI ex USA	0.16	(5.44)	(5.44)	(1.48)
MSCI ACWI ex USA Minimum Volatility	0.90	(2.05)	(2.05)	6.69
MSCI EAFE	0.64	(5.91)	(5.91)	1.16
MSCI Emerging Markets	(2.26)	(6.97)	(6.97)	(11.37)
MSCI ACWI ex USA Small Cap	1.02	(6.52)	(6.52)	0.03

Source: Bloomberg. Indexes are total return.

Non-U.S. Equity (local currency)	MTD (%)	QTD (%)	YTD (%)	1Y (%)
MSCI ACWI	2.51	(4.75)	(4.75)	8.79
MSCI ACWI ex USA	1.02	(3.90)	(3.90)	2.02
MSCI ACWI ex USA Minimum Volatility	2.35	(0.06)	(0.06)	9.86
MSCI EAFE	2.14	(3.73)	(3.73)	6.21
MSCI Emerging Markets	(2.06)	(6.11)	(6.11)	(9.86)
MSCI ACWI ex USA Small Cap	1.95	(4.99)	(4.99)	4.00

Source: Bloomberg. Indexes are total return.

Fixed Income Markets

The U.S. Treasury yield curve was up across all maturities during the quarter but most sharply in the intermediate range, with pronounced flattening further out the curve. The 2-year Treasury was up 160 basis points to 2.34% while the 10-year Treasury yield also ended the quarter at 2.34%, up 83 basis points. The now nonexistent spread is as low as it has been since August 2019, a time of slowing economic growth. Investment-grade credit spreads widened during the quarter as did the spread on the broad high yield market, closing the quarter at 3.25%. The Federal Open Market Committee met twice during the quarter as scheduled, raising the overnight rate off zero by 0.25% at their March meeting. Through the Fed’s “dot plot,” it is messaging that the current intent is for additional increases totaling 150 basis points before the end of

2022. Their median forecast for year-end 2023 is for a Fed Funds Rate of 2.75%. During the January meeting, the committee announced that it will continue to reduce (i.e., taper) the monthly pace of its asset purchases and likely end them completely “in early March.” As the quarter ended, however, the Fed was still adding assets, moving its balance sheet toward \$9 trillion.

U.S. Fixed Income	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Bloomberg U.S. Aggregate	(2.78)	(5.93)	(5.93)	(4.15)
Bloomberg Long Term Treasury	(5.34)	(10.58)	(10.58)	(1.42)
Bloomberg Long Term Corporate	(2.78)	(11.41)	(11.41)	(4.26)
Bloomberg U.S. TIPS	(1.86)	(3.02)	(3.02)	4.29
Bloomberg U.S. Credit	(2.51)	(7.42)	(7.42)	(4.16)
Bloomberg U.S. Corporate High Yield	(1.15)	(4.84)	(4.84)	(0.66)
S&P/LSTA Leveraged Loan	0.05	(0.10)	(0.10)	3.25

Source: Bloomberg. Indexes are total return.

Market Rates	Mar 31	Dec 31	Sept 30	June 30
10-Year Treasury	2.34	1.51	1.49	1.47
10-Year Breakeven Inflation	2.83	2.59	2.38	2.34

Source: Bloomberg. Indexes are total return.

Global Fixed Income	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Bloomberg Global Aggregate	(3.05)	(6.16)	(6.16)	(6.40)
Bloomberg Global Aggregate (Hdg)	(2.16)	(4.97)	(4.97)	(3.92)
Bloomberg EM LC Gov’t Universal	(1.66)	(2.33)	(2.33)	(0.12)
Bloomberg EM LC Gov’t Universal (Hdg)	(1.99)	(2.95)	(2.95)	(2.45)

Source: Bloomberg. Indexes are total return.

Real Asset Markets

Real estate securities were down during the first quarter in both the U.S. and abroad. Most other real assets, however, enjoyed a strong start to the new year. Commodity prices rallied, fueled in part by the geopolitical risks from the Ukraine crisis, as crude oil was up 33.3% to \$100.28 per barrel. This is the first time oil has been above \$100 since mid-2014, when a boom in shale oil in the U.S. started driving prices considerably lower. Natural gas prices also rose dramatically after a drop during the fourth quarter, increasing by 51.3% and ending March at \$5.64 per million BTUs. Natural gas is up more than 100% for the past 12 months. Finally, gold prices enjoyed another strong quarter and were up 6.6%, finishing at approximately \$1,949 per troy ounce.

Long-term Treasuries suffered their second-worst quarter in five years, down -10.6%

Oil is above \$100/barrel for the first time since mid-2014

Real Assets	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Wilshire US Real Estate Securities Index SM	6.84	(3.85)	(3.85)	29.09
Wilshire Global Real Estate Securities Index SM	5.51	(2.98)	(2.98)	21.98
FTSE Global Core Infrastructure 50/50	7.51	3.90	3.90	15.30
Alerian Midstream Energy	7.02	23.95	23.95	41.93
Bloomberg Commodity	8.65	25.55	25.55	49.25
Gold	1.49	5.92	5.92	13.45
Bitcoin	9.87	(1.22)	(1.22)	(22.45)

Source: Bloomberg. Indexes are total return.

Alternatives

Liquid alternative managers posted a negative quarter, with all sub-strategies ending the quarter down except for global macro. Global macro managers led the way for the Index, posting strong returns for the quarter that were driven by short rates and long commodity positioning. The upward price action in commodities was further intensified by the onset of the Russian invasion of Ukraine. Relative value managers struggled as risk-off appetite created weakness throughout the quarter and yields continued to tick up. Equity hedge and multi-strategy managers had a difficult time navigating the broad-based equity selloffs on the back of rising yields and rising geopolitical risks. Event driven strategy performance was negative but muted with most losses coming from equity market weakness and volatility early in the quarter but remained flat for the remainder as deals continued to go through despite market uncertainty.

Global macro managers performed well, driven by short rates and long commodity positioning

Alternatives	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Wilshire Liquid Alternative Index SM	0.16	(1.85)	(1.85)	0.60
Wilshire Liquid Alternative Equity Hedge Index SM	0.85	(2.38)	(2.38)	4.63
Wilshire Liquid Alternative Event Driven Index SM	0.01	(0.74)	(0.74)	(0.49)
Wilshire Liquid Alternative Global Macro Index SM	3.79	5.35	5.35	6.19
Wilshire Liquid Alternative Multi-Strategy Index SM	0.33	(1.93)	(1.93)	0.86
Wilshire Liquid Alternative Relative Value Index SM	(1.09)	(3.11)	(3.11)	(2.90)

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

Important Information

This material contains confidential and proprietary information of Wilshire, and is intended for the exclusive use of the person to whom it is provided. It may not be disclosed, reproduced, or redistributed, in whole or in part, to any other person or entity without prior written permission from Wilshire. Wilshire is a global financial services firm providing diverse services to various types of investors and intermediaries. Wilshire's products, services, investment approach and advice may differ between clients and all of Wilshire's products and services may not be available to all clients. For more information regarding Wilshire's services, please see Wilshire's ADV Part 2 available at www.wilshire.com/ADV.

The Wilshire Indexes are calculated and distributed by Wilshire. The indices do not represent an investment. It is not possible to invest directly in an index. Exposure to an asset class represented by an index may be available through investable instruments derived from that index. Wilshire makes no representations regarding the advisability of investing in investment products based on the Wilshire Indexes not sponsored, endorsed, sold or promoted by Wilshire. Index returns do not reflect payment of certain sales charges or fees an investor may pay to purchase the securities underlying the Index or investment vehicles intended to track the performance of the Index. The imposition of these fees and charges would cause actual performance of the securities/vehicles to be lower than the Index performance shown. Inclusion of a company in the Wilshire Indexes does not in any way reflect an opinion of Wilshire on the investment merits of the company. Index returns are preliminary and are subject to revision.

This material is intended for informational purposes only and should not be construed as legal, accounting, tax, investment, or other professional advice. Past performance does not guarantee future returns. This material may include estimates, projections and other "forward-looking statements." Forward-looking statements represent Wilshire's current beliefs and opinions in respect of potential future events. These statements are not guarantees of future performance and undue reliance should not be placed on them. Such forward-looking statements necessarily involve known and unknown risks and uncertainties, which may cause actual events, performance and financial results to differ materially from any projections. Forward-looking statements speak only as of the date on which they are made and are subject to change without notice. Wilshire undertakes no obligation to update or revise any forward-looking statements.

This material represents the current opinion of Wilshire based on information from sources believed to be reliable. Wilshire gives no representations or warranties as to the accuracy of such information, and accepts no responsibility or liability (including for indirect, consequential or incidental damages) for any error, omission or inaccuracy in such information and for results obtained from its use. Information and opinions are as of the date indicated, and are subject to change without notice.

Past performance is not indicative of future results.

Wilshire Advisors LLC (Wilshire) is an investment advisor registered with the SEC. Wilshire® is a registered service mark. All other trade names, trademarks, and/or service marks are the property of their respective holders.

Copyright © 2022 Wilshire. All rights reserved.

14763089 E0622

More information

For more information, please contact us directly:

T +1 310 451 3051

Wilshire

1299 Ocean Avenue, Suite 700, Santa Monica, CA 90401

wilshire.com