Market Volatility Continues through Q3

Historically Challenging Year

The first three quarters of 2022 have been difficult to navigate. Stocks and bonds have both experienced broadly negative returns. Even within the respective markets, almost all allocations have struggled year-to-date. The only standout allocations that have been able to notch positive returns are energy and commodities, and since mid-year, commodities have given back some of their gains.

Equity Revaluation

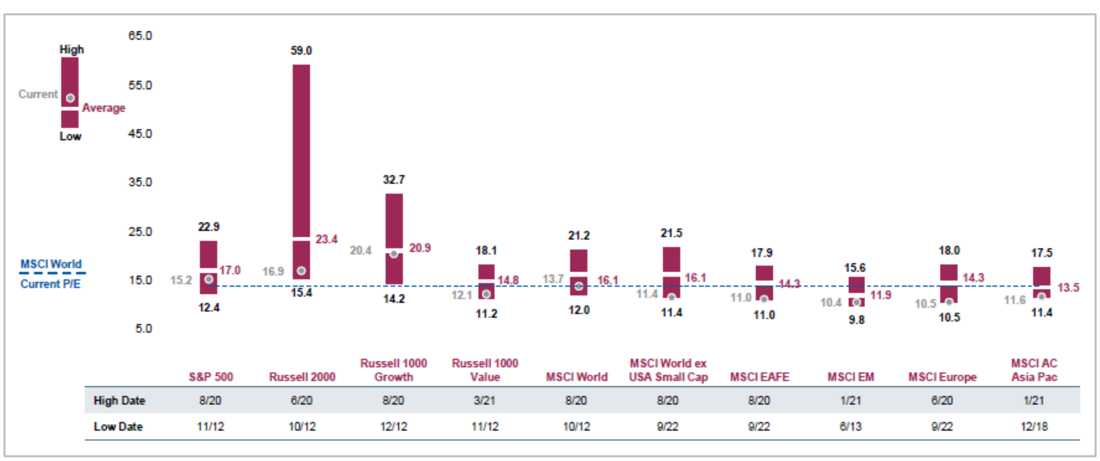
The equity indices below show the trend through the first three quarters. Globally, stocks have moved lower each quarter, ending September down roughly 25%. We have experienced significant rallies along the way, but each has failed as the move again turned lower.

	Security	Currency	Price Change	Total Return	Difference	Annual Eq
1)	SPX Index	USD	-24.77%	-23.88%	2.82%	-30.57%
2)	MXEA Index	USD	-28.88%	-26.70%	--	-33.99%
3)	MXWDU Index	USD	-28.25%	-26.16%	.54%	-33.33%
4)	MXEF Index	USD	-28.91%	-26.96%	-.26%	-34.30%
5)						
6)						

Source: Bloomberg

The general reset in equity markets does point to better opportunities ahead. Current P/E ratios have begun to look reasonably attractive. We have seen this revaluation in U.S., Developed International, and Emerging Markets.

Regions/Styles: Current NTM P/E vs. 10-Year High, Low, Average



	S&P 500	Russell 2000	Russell 1000 Growth	Russell 1000 Value	MSCI World	MSCI World ex USA Small Cap	MSCI EAFE	MSCI EM	MSCI Europe	MSCI AC Asia Pac
High Date	8/20	6/20	8/20	3/21	8/20	8/20	8/20	1/21	6/20	1/21
Low Date	11/12	10/12	12/12	11/12	10/12	9/22	9/22	6/13	9/22	12/18

Source: FactSet as of 09/30/2022. NTM P/E is market price per share divided by expected earnings per share over the next twelve months. Data provided is for informational use only. See end of report for important additional information

To our eye, given the tenuous geopolitical backdrop and its implications, domestic equities have an advantage over their peers in parts of the world facing greater uncertainty around security, energy, and growth.

Geopolitical Stress in the System

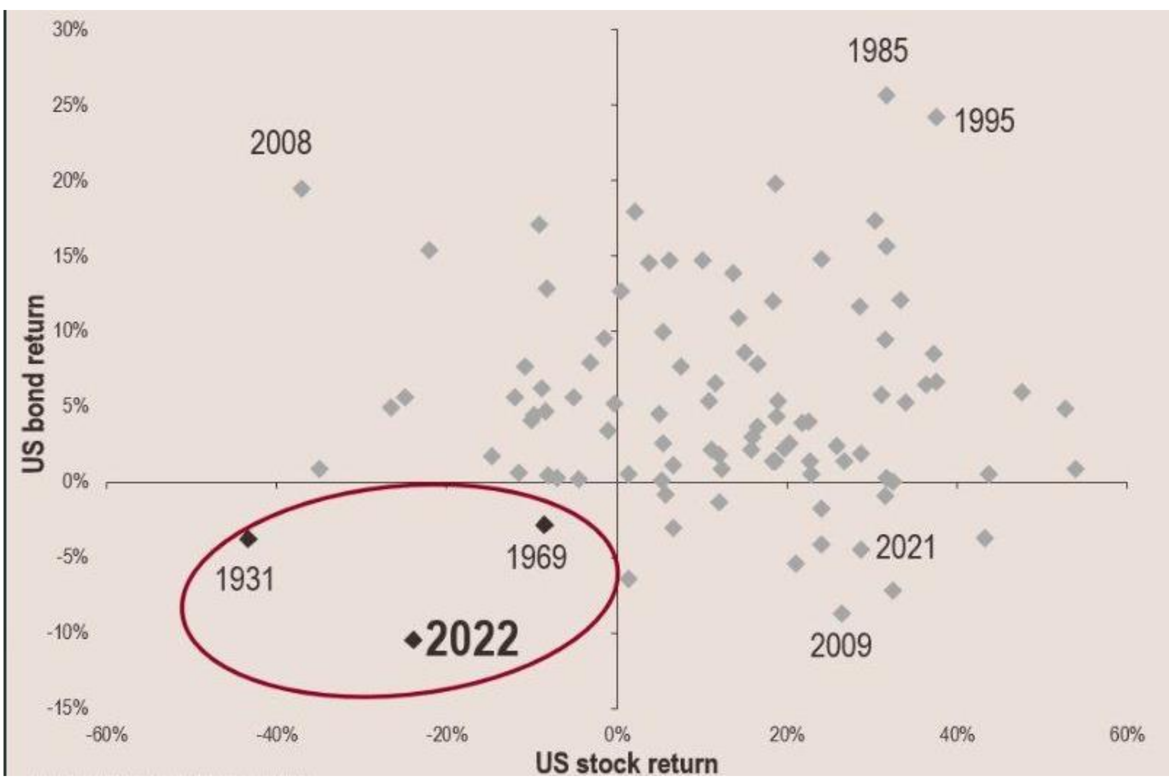
The uncertainty, exacerbated by the pandemic and certain countries responses to it, have fueled a deglobalization movement. While securing supply chains was perhaps the initial driver of the movement, the impetus has broadened. The U.S. government has begun to encourage re-shoring or friend-shoring, bringing supply chains back to the U.S., or at a minimum, to countries that are allies of the U.S. This push is likely to benefit companies whose earnings are domestically focused, providing a tailwind for small-cap U.S. companies.

There is also a growing national security concern. We can no longer blindly depend on suppliers based within countries that seek to undermine the U.S. and its allies, to deliver the inputs that are necessary for essential infrastructure and existential defense. This can be seen in President Biden’s technological decoupling push in the export controls recently placed on semiconductor technology, attempting to limit China’s access to the most advanced chips. Use of force to reunite Taiwan and subjugate its people would likely drive a broader break between democratic nations and the Chinese Communist Party (CCP).

Ballast from Bonds?

Through recent history, volatility as we have experienced in the equity markets would typically be buffered by solid returns in the bond markets. Not this year. The multi-decade inverse relationship (when one is down, the other is up) between stocks and bonds has disintegrated. Stocks and bonds have fallen in tandem for only the third time since 1926, an extremely rare occurrence.

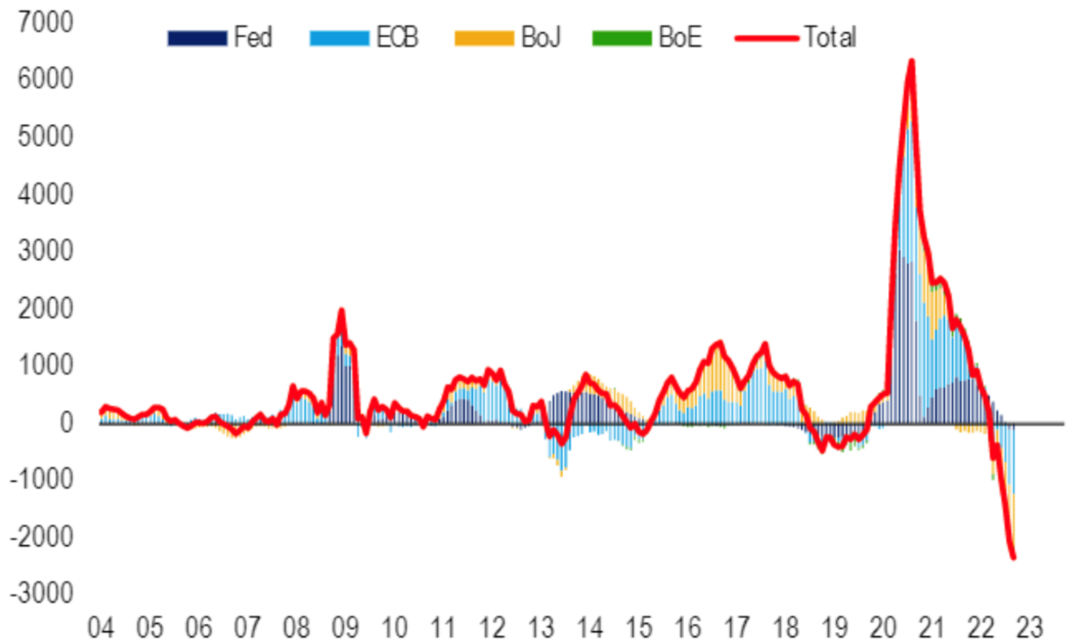
U.S. Stock vs Bonds Returns 1926-2022



Source: Bloomberg, Lombard Odier

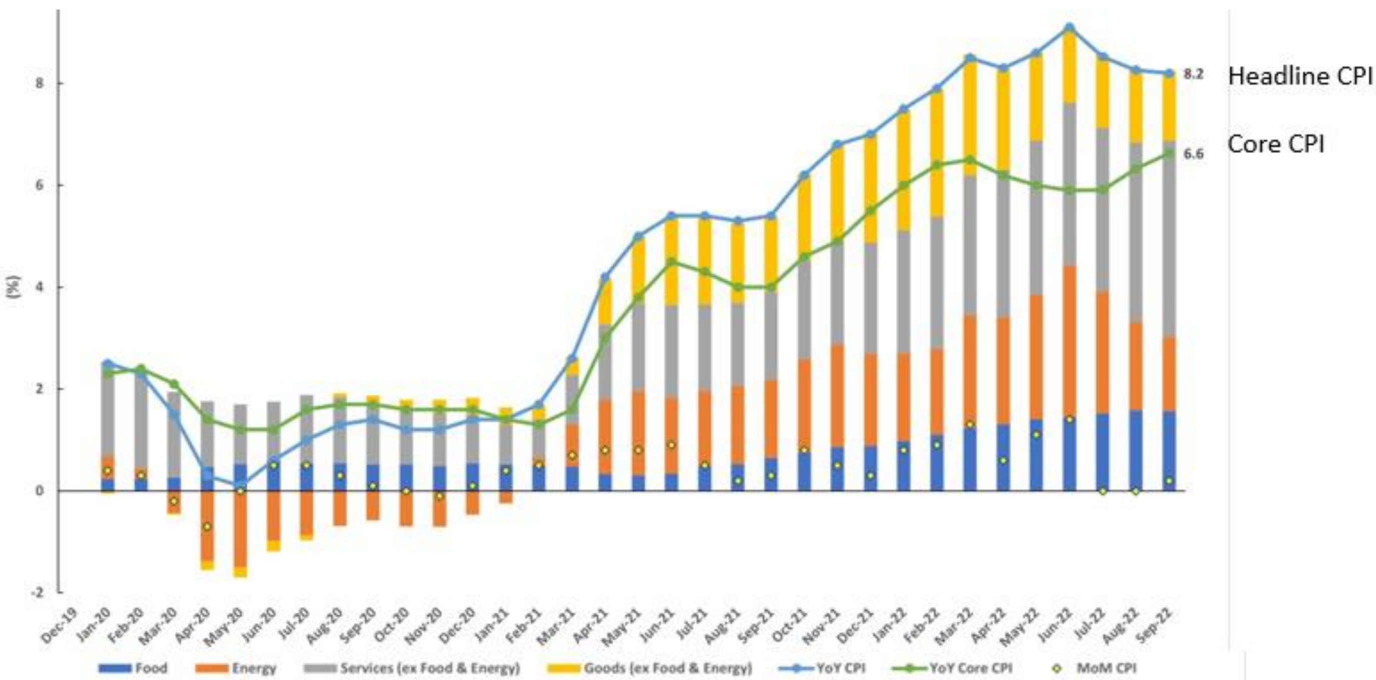
Global central banks have been busily increasing interest rates and shrinking their balance sheets, pushing bond prices lower, in their efforts to reduce inflation that began during the economic re-opening and demand surge following the pandemic shut downs, then exacerbated by a tight labor market, and the energy, fertilizer, food and related shortages caused by Russia’s war in Ukraine.

G4 Central Banks' balance sheet -$3.1tn in past 7 months
6m change in G4 central banks' balance sheet ($bn)



Source: BofA Global Investment Strategy, Bloomberg, Haver

October's Consumer Price Index (CPI) headline reading remained above 8%, and Core inflation came in at 6.6%, the highest level since 1982.

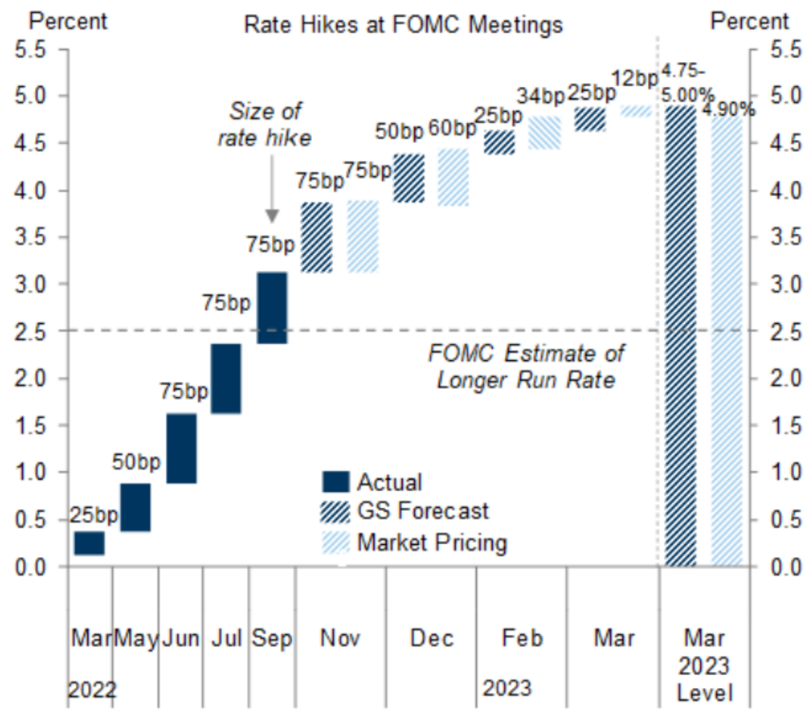


Source: U.S. Bureau of Labor Statistics

This drove the Federal Reserve to raise interest rates by another 75 basis points at the November meeting in an effort to reduce the likelihood of continued inflation increases.

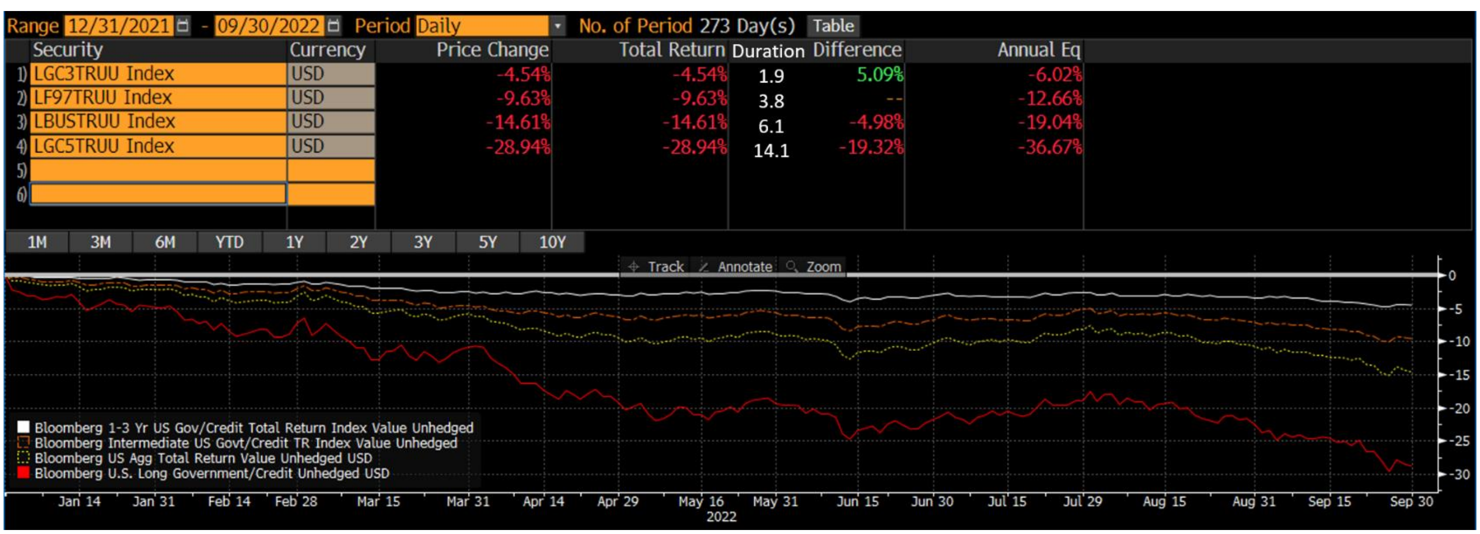
Goldman Sachs expects the November rate hike to be the final 75 basis point increase, to be followed by a handful of smaller increases before reaching the terminal rate in Q1 of 2023. This is a fairly consensus call. Having the majority of the move in interest rates behind us should help to dampen market volatility.

Rate Hikes at FOMC Meetings



Source: Goldman Sachs

The significant rise in interest rates has pushed bond returns broadly into the red. The best you could do this year was to own less risk than your benchmark. Credit risk and interest rate risk were both detrimental to performance through the first three quarters of the year. The more interest rate risk (Duration) in a bond portfolio, the more negative the returns experienced. In the chart below you can see that even an exposure such as the 1-3 year Government/Credit that is very short-term and high-quality, has lost almost 5% of its value this year. The much longer duration of the U.S. Long Government/Credit magnified the impact of rising rates, resulting in performance comparable to what equity indices have experienced this year.



Source: Bloomberg

Income Opportunity

Moving forward from this point, owning fixed income is a significantly more attractive proposition than it has been in almost 15 years. The higher yields that are now accessible due to the rise in interest rates provide cashflow for accounts that need it, historically with less risk than owning alternative income investments such an equities, business development companies (BDCs), or preferred stock.

Investment grade corporate bonds that mature in one year now provide yields above 5%. This makes short-term bond portfolios extremely compelling and supportive of attractive portfolio returns going forward.
Taking on moderately longer maturities (less than 10 years) in investment grade corporate bonds provides access to 6% yields.

	Averages					
	Coupon (%)	Price ($)	Yield to Worst (%)	Spread (bps)	Maturity (yrs.)	Duration (yrs.)
U.S. High Grade						
Bloomberg U.S. Corp. Investment Grade Index	**3.69**	**85.5**	**5.93**	**158**	**10.9**	**7.0**
AAA Index	3.15	81.5	4.93	63	17.6	10.0
AA Index	3.12	83.4	5.16	84	13.7	8.4
A Index	3.44	86.1	5.73	137	10.2	6.7
BBB Index	4.00	85.3	6.23	190	10.9	6.9

Source: Bloomberg, J.P. Morgan, ICE BofA Data Indices, LLC, Factset, and Leveraged Commentary & Data (LCD), as of 10/31/2022. Data provided is for informational use only. Past Performance is not a reliable indicator of future results. See end of report for important additional information. Yield to maturity is shown for the Morningstar LSTA U.S. Leveraged Loan Index and the FTSE World Government Bond Index. Loan Index coupon value includes LIBOR (shown as "L+"). Loan Index spread represents the three-year discounted spread over LIBOR. Returns of the ICE BofA Developed Mtks HY Ex-Sub Financial Index are USD Hedged. The averages for the index are unhedged.

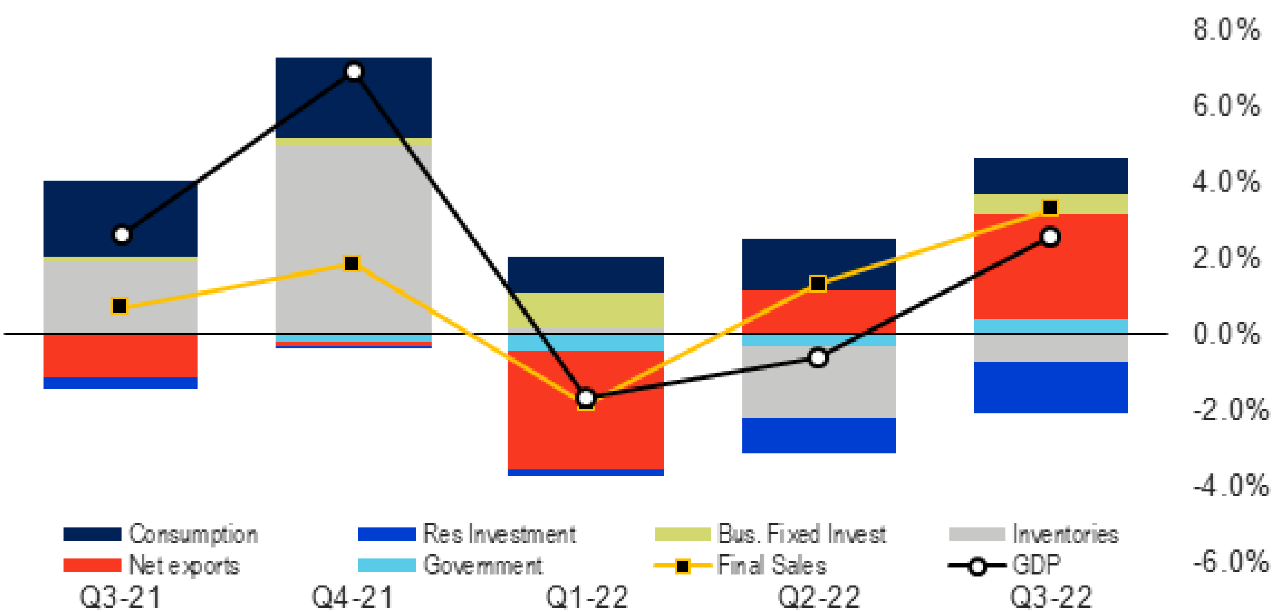
For many years a portfolio would have had to take on significant interest rate and credit risk in order to find yields in this range. Only an aggressive fixed income portfolio willing to take on equity like risk could hope to earn 5% or 6% yields. Today, we can build portfolios with bonds issued by stable, household names providing that level of yield. It has been a sea change in the fixed income markets.

Growth Rebound in Third Quarter

GDP had a positive print in Q3, growing by 2.6% and avoiding a third consecutive negative reading. While it was nice to see a positive number for the first time this year, the result may not be as strong as it appears. The major contributor was Net Exports, driven by falling imports. As U.S. companies struggle with inventory levels as a result of resolved supply chain disruptions/over purchasing, they have less need to import additional inventory. It's a negative underlying issue that was helpful to Q3 GDP.

GDP Growth

Qtr./Qtr.% Annualized with Sector Contributions

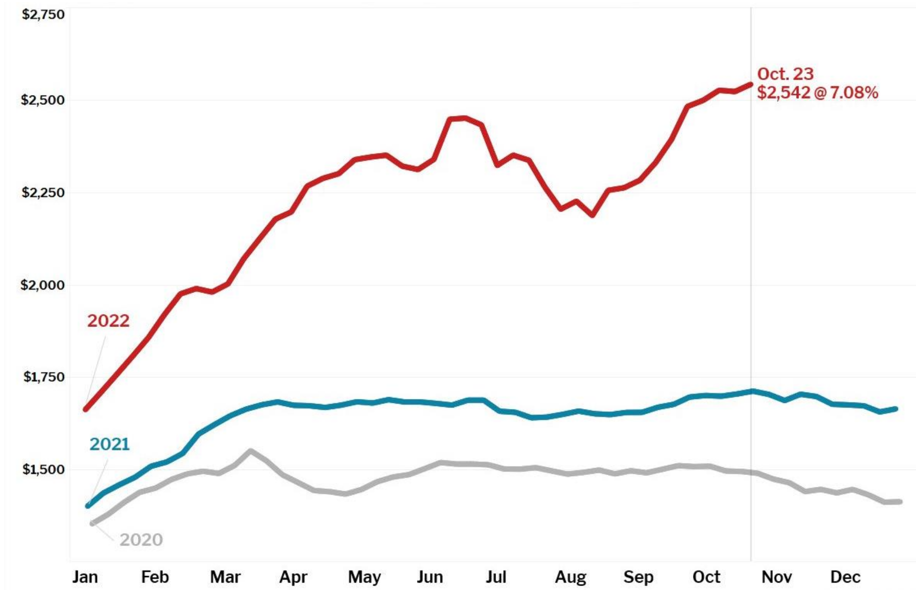


Source: Bureau of Economic Analysis and FHN Financial

It does reset the clock for an official recession, as we will again have to see two or more consecutive quarters of GDP contraction for the designation to be considered.

Best House in a Bad Neighborhood
While the interest rate increases have made bonds more attractive, they have had the opposite effect on real estate. Mortgage rates have been driven above 7%, making the cost of financing a house purchase significantly more expensive.

Homebuyer Mortgage Payments +48.5% Year Over Year
Mortgage payment on the 4-week rolling average of the median asking price



Source: Redfin analysis of MLS data, Freddie Mac Primary Mortgage Market Survey

Home prices have risen 39% since March 2020, according to the National Association of Realtors. The lofty price increases experienced are beginning to slow/reverse. Some experts, like Mark Zandi, chief economist at Moody's, are calling for a nationwide decline in prices of around 10%, with hotter markets like Nashville falling significantly more.

Source: S&P CoreLogic Case-Shiller, Bloomberg

Even so, the U.S. housing market is better positioned than most. Many international housing markets did not decline as much as the U.S. following the Great Financial Crisis (GFC) and instead continued to move higher, leaving them even more expensive now.

Which Cities Have the Highest Risk of a Housing Bubble
Index scores for housing bubble risk in selected cities in 2022 (>1.5=bubble risk)

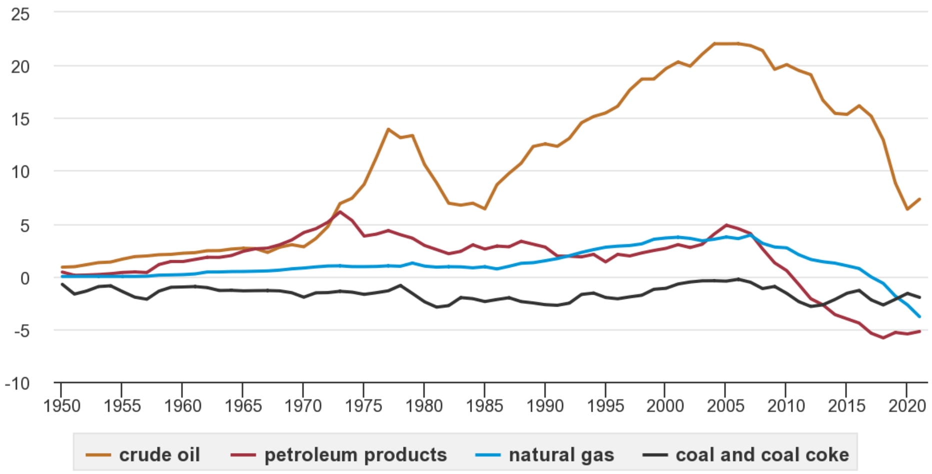
Study of 25 cities taking into account housing-price-to-income, price-to-rent, mortgage-to-GDP, construction-to-GDP and price-city-to-country ratios

Source: UBS Global Real Estate Bubble Index, Statista

In many of these countries, it is also significantly more common than in the U.S. to have a floating interest rate on your mortgage loan. That means that the monthly payment gets larger as interest rates move higher, as they are all around the world right now. The cashflow stress caused by rising monthly payments, and the starting point of more extended pricing, makes it more likely for a housing crisis to be experienced internationally than within the U.S. Coming out of the Great Financial Crisis we addressed the weaknesses within our system. Our banks are well capitalized. Most mortgages are fixed rate, and homeowners broadly took advantage of the low rates experienced, locking them in while they could.

Shelter from the Storm
The U.S. is also in a fortunate position with regard to energy production.

U.S. Energy Net Imports by Major Source, 1950-2021
Quadrillion British thermal units



Source: U.S. Energy Information Administration, *Monthly Energy Review*, Table 1.4 c, April 2022, preliminary data for 2021

We are not facing the same prospects of a difficult winter that our friends in Europe are fretting about. Nor are we geographically encroached upon by geopolitical adversaries. The insulation of large oceans to our east and west provide physical buffers that are not easily overcome. Our currency remains very strong and helps to dull our experience of inflation.

While there are many challenges, the trials experienced this year have also created attractive entry points. Short-term volatility leads to long-term opportunity and we are eagerly positioning strategies to benefit from these opportunities as we move forward towards 2023.

Wishing you a wonderful and prosperous Thanksgiving,

Timothy D. Calkins, CFA
Co-Chief Investment Officer
November 2022

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