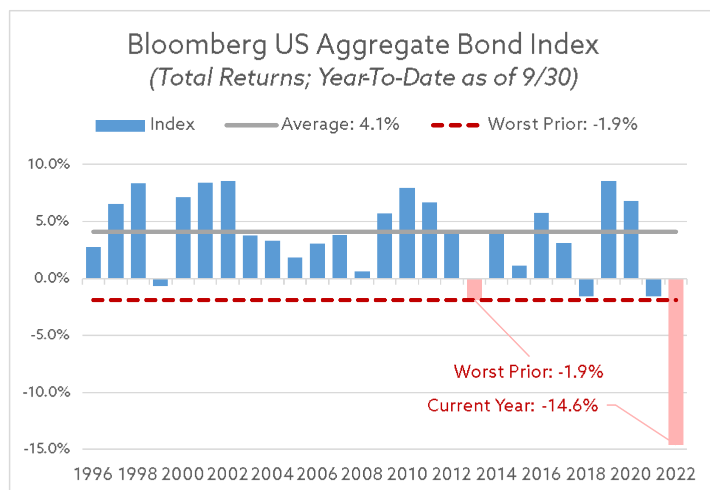
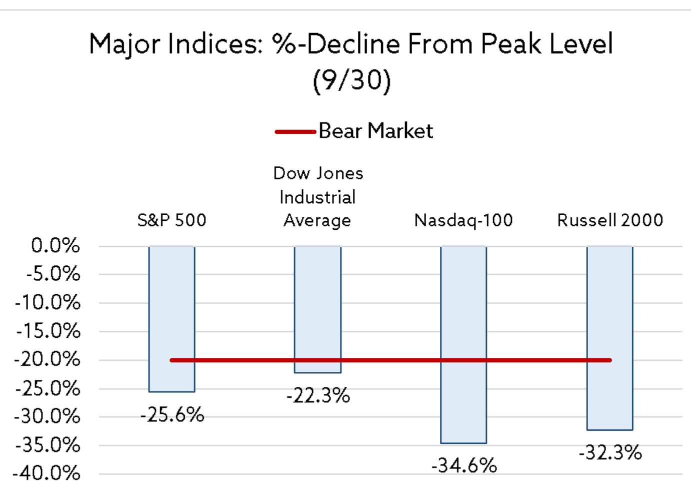
PENDLETON STREET
BUSINESS ADVISORS

Pendleton Street Advisors
3rd Quarter 2022 Investment Commentary
October 14, 2022

Index Returns	3rd Quarter	Year-To-Date	Trailing Twelve Months
S&P 500 US Large Cap Stock Index	-4.9%	-23.9%	-15.5%
Russell 2000 Small Cap Stock Index	-2.2%	-25.1%	-23.5%
MSCI All Country World Ex-USA Stock Index	-9.9%	-26.5%	-25.2%
Barclays Capital US Aggregate Bond Index	-4.8%	-14.6%	-14.6%
US Core Consumer Price Index - (Inflation)	1.6%	4.9%	6.3%

The challenging market environment in the first half of the year continued into the third quarter as all major US stock indices declined to bear market territory *(-20% from peak-level)*. Bonds also fell further, contributing to the worst year for the Bloomberg US Aggregate Bond Index since our data began in 1996. While the prior few years we have been focusing primarily on efficiency, this year our focus has turned to resilience – both in terms of how our portfolios are allocated across major asset classes (*stocks, bonds, real assets, and cash*), and in the durability of the entities (*companies and countries*) in which we invest. In this quarter's commentary we survey the current market environment, discuss the forces impacting primary market drivers, and define how the concept of resilience factors into our management of your portfolios.





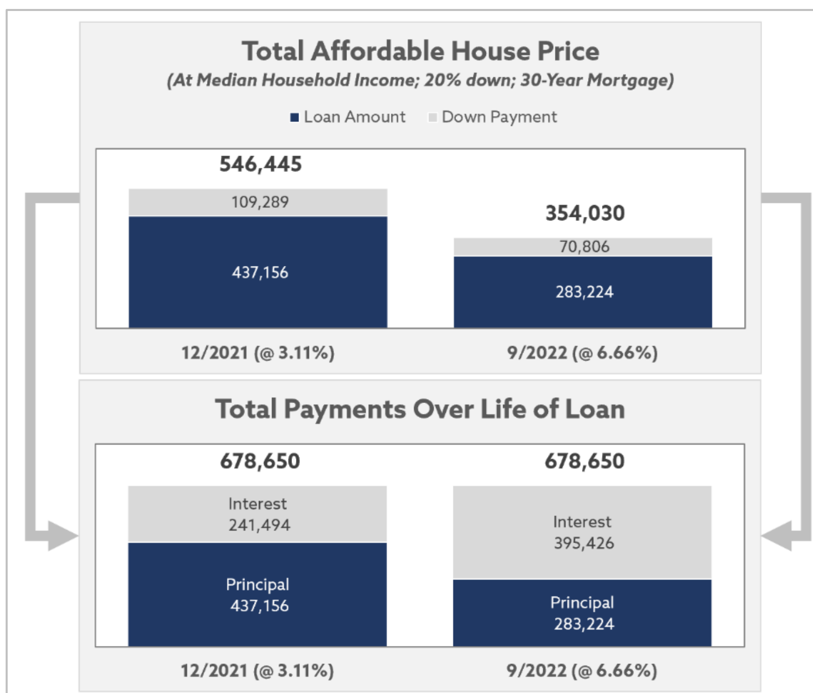
Market Drivers: Currently, core market drivers (inflation, interest rates, and growth) are working against markets. Inflation is excessive in the US and across most of the developed world, leading central banks to raise short-term interest rates, sharply. Inflation and higher rates both threaten growth in the near-term.

- **Inflation** remains at multi-decade highs despite moderation in the prices of commodities and declining activity in the housing market.
- **Interest rates** have increased approximately 3% in the span of six months.
- **Economic growth** is expected to approach 0% by year-end.

	Indicator Levels As Of...						
	5-Year Average	Year-Ago	2021 Year-End	Q1 '22	Q2 '22	Most-Recent	Expected in 2023
Inflation (CPI Year-Over-Year %-Change)	**3.1%**	**5.3%**	**7.0%**	**8.5%**	**9.1%**	**8.3%**	**2.80%**
Source: Bureau of Labor Statistics		*8/31/21*	*12/31/21*	*3/31/22*	*6/30/22*	*8/31/22*	
Effective Federal Funds Rate	**1.09%**	**0.06%**	**0.07%**	**0.33%**	**1.58%**	**3.08%**	**4.60%**
Source: Federal Reserve		*9/30/21*	*12/31/21*	*3/31/22*	*6/30/22*	*9/30/22*	
FOMC 2022 Estimated Real GDP Growth	*N/A*	**3.30%**	**4.00%**	**2.80%**	**1.70%**	**0.20%**	**1.20%**
Source: Federal Reserve		*3/17/21*	*1/5/22*	*3/31/22*	*6/30/22*	*9/21/22*	

Consequently, markets have performed poorly. **It has been a year of reckoning for much of the financial world, including central banks:**

- **Developed economies** have experienced a material rise in inflation after years of monetary authorities setting interest rates near 0% and pumping the markets with liquidity, resulting in the central banks of affected countries raising interest rates.
- **Developing economies** are experiencing much less inflation than the rest of the world but rising rates in the developed world hit emerging economies both in terms of economic production (*as major exporters to developed economies*) as well as borrowing capacity and cost.
- **Businesses** in many cases are experiencing significantly higher borrowing costs, higher costs of production, and a significant labor shortage while they simultaneously deal with a Fed-induced slow-down in demand.
- **Consumers** are experiencing a material decline in the purchasing power of their savings and income, while their net worth has also declined as a result of falling values in financial assets (*i.e. stocks and bonds*).



Inflation and rising interest rates impact the level of activity in markets, driving volatility up and prices down; but, **how** that happens is not always straight-forward. Housing offers a good example: Based purely on the increase in mortgage rates since the beginning of the year, **a lender now will loan you 2/3rd of what they would have in December, but you'll pay them 100% of what you would have on a monthly-payment basis.**

Similar variables impact valuation and prices of stocks, bonds, and even commodities. When interest rates increase, future cash flows are discounted at a higher rate, causing the price an investor is willing to pay for a future dollar of cash flow to be lower.

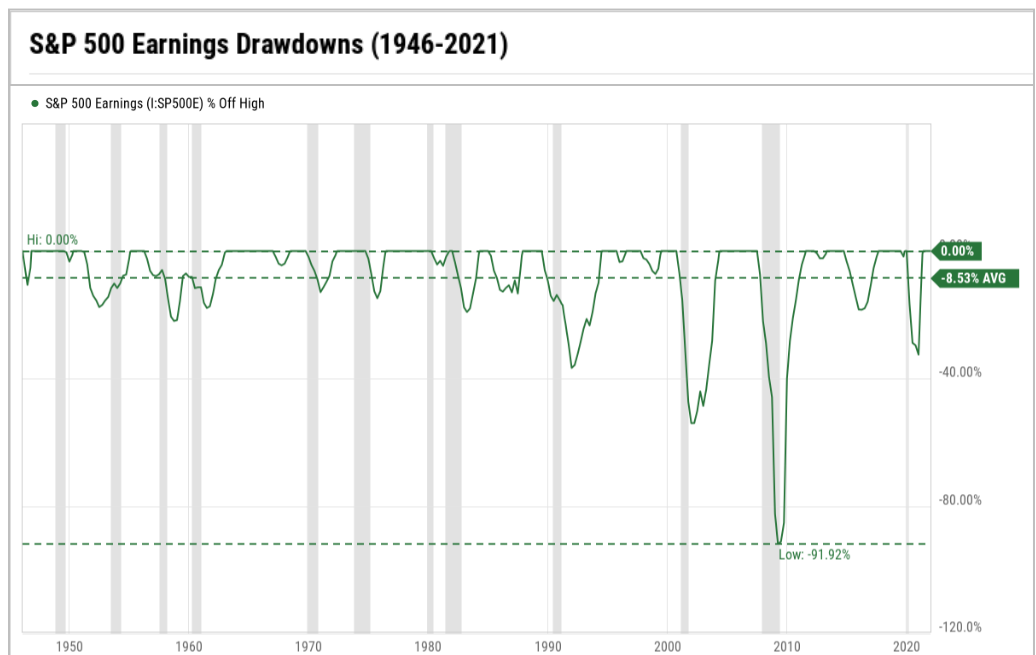
Stocks have declined both in terms of price and valuation relative to earnings as a result of ***actual*** and further ***expected*** changes to core market drivers, including the rapid rise in interest rates.

The Forward Price-to-Earnings multiple (P/E) for the S&P 500 has declined from 21.4x at the beginning of the year, to 15.1x as of 9/30 – a nearly 30% reduction in the price investors are willing to pay for the average S&P 500 company's earnings, and roughly equivalent to the impact rising rates have had on housing affordability. The price (*or technically, level)* of the index has not declined as significantly (-24.8% year-to-date) because the reduction in P/E has been offset by an increase in expected earnings since then of 5.1%.

Valuation measure	Description	Latest	25-year avg.*	Std. dev. Over-/under-Valued
P/E	Forward P/E	15.15x	16.84x	-0.50
CAPE	Shiller's P/E	27.15x	27.97x	-0.13
Div. Yield	Dividend yield	1.90%	1.99%	0.26
P/B	Price to book	3.18x	3.10x	0.10
P/CF	Price to cash flow	11.51x	11.18x	0.15
EY Spread	EY minus Baa yield	0.57%	0.24%	-0.17

At current index levels and expected earnings, stocks appear to be pricing in a 1.50% increase in the Fed Funds rate by year-end. The wild card is whether companies will be able to live up to the market's expectations regarding earnings/cash flow. **The magnitude, speed, and persistence of the rise in interest rates and inflation threaten to derail corporate growth and profitability.**

Either way, we expect **quality** – *namely, balance sheet strength, growth in excess of inflation, and preservation of profit margins* - to be the most important determinant of resilience - how successfully underlying businesses can manage this downturn, and how much and how quickly their stocks recover when markets can see the light at the end of the tunnel enough to begin to believe the worst is over.



We have been focused since early in the year on reducing risk in portfolios by selectively selling positions and retaining cash, while also recognizing that markets will move past these current challenges at some point, and that historically that point has come unannounced and before it was widely expected. As a result, **portfolios now hold more cash than at any other time since 2009**.

We have been searching for high-quality assets at low-quality prices, and we are beginning to see those with more frequency than we have in the prior 3-5 years (*excluding the onset of COVID in Q2 of 2020*). That said, due to high uncertainty in the near-term (3-6 months), cash and short-term interest-bearing investments offer a high bar for other liquid assets to beat. We believe there will be more opportunities for us to redeploy cash going forward, as markets for both stocks and bonds have reached levels of distress that require many institutional and leveraged investors to throw the good out with the bad in order to access to liquidity. This forced selling is also a reason for long-term, unleveraged investors to be wary of joining in with the herd of ***unforced*** sellers for reasons that don't apply.

Our firm values frequent communication with you to discuss changing conditions and to ensure that we understand and stay updated on your objectives. Our client-service staff will be reaching out to you as usual to schedule a meeting. If you would like to set up a meeting sooner, please contact us at your convenience. We look forward to hearing from you.

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