

Current Investment Strategy and Themes

- **The near-term focus on investment portfolios should be on dampening the effects of stock and bond market drawdown risk in this environment of heightened uncertainty.**
- **High quality assets, low duration and exposure to non-correlated assets are the key now.**

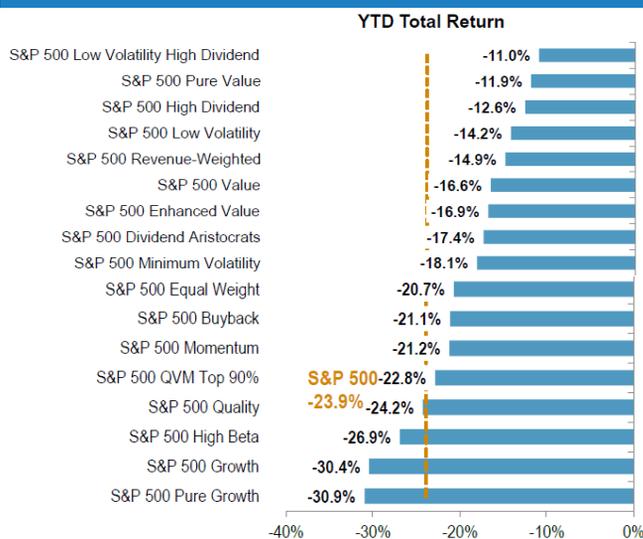
The Markets in Review: September 2022

- There was no place to hide in the capital markets during the 2nd quarter as investors fled risky assets. The market certainly discounted more interest rate hikes to come, an eventual global economic recession, and great uncertainty tied to the geopolitical, fiscal, and monetary environment.
- We positioned our portfolios to reflect this uncertainty in March. Equity exposure has outweighed the factors of low volatility, high dividend payers, and quality, and our bond exposures to low-duration, high-quality instruments. The diversifiers include hedged equity, long commodities, long/short managed futures, long/short credit, and Merger Arb. The commodity exposure and exposure to short and intermediate-term TIPs have helped against the rapid rise in inflation.
- We believe the markets have priced in a decent amount of pain in terms of rate hikes and shrinking profit margins, but we think there is more pain to come. Real fed fund rates remain negative, and the job market is at full employment. Further rate hikes are necessary to help cool demand, and the impact will be higher unemployment, lower household consumption, and negative real growth.
- The peak-to-trough decline in U.S. stock prices stands near -25%. The average peak-to-trough drop for the S&P 500 during all bear markets since 1946 has been -34%. This downturn might not be as severe as the March 2000 tech bubble burst of -49% or the 2008 financial crisis stock market downturn of nearly -50% but we would expect further declines from here.
- This business and market cycle is a bit different from past cycles of boom/bust. Financial leverage is undoubtedly present in today's market but nowhere near the level of the 2008 crisis. Our longer-term concern is how we increase the rate of productivity growth from current low levels without breakthrough technologies and a labor pool that is not prepared to adapt to such changes.
- Several months ago, we published a short white paper on the new 60/40 portfolio. The critical foundation of this new portfolio is built on four pillars: 1.) inflation-proofing, 2.) short duration, 3.) diversification, and 4.) potential economic growth opportunities. We still believe this approach to portfolio construction will serve long-term investors well in this environment. We continue to see potential opportunities that we will explore, but we will only move into these investments when we see a clear catalyst for long-term above average growth. Smaller cap stocks, home and abroad, and select emerging market equities are a few examples of potential longer-term opportunities.

Key Market Indicators				
Bullish	Favorable	Neutral	Cautious	Bearish
	Sep 2022	3rd Quarter	Year to Date	Current View
Equities				
U.S. Large Cap	-9.21%	-4.88%	-23.87%	Cautious
U.S. Small Cap	-9.58%	-2.19%	-25.10%	Cautious
International Developed	-9.35%	-9.36%	-27.09%	Cautious
Emerging Markets Equity	-11.72%	-11.57%	-27.16%	Cautious
Fixed Income				
U.S. Aggregate	-4.32%	-4.75%	-14.61%	Bearish
U.S. Government	-3.41%	-4.30%	-12.95%	Cautious
U.S. Corporate	-5.07%	-4.95%	-18.07%	Neutral
U.S. High Yield	-3.97%	-0.65%	-14.74%	Cautious
Non-U.S. Developed	-6.63%	-10.00%	-26.86%	Cautious
Emerging Market Debt	-4.63%	-4.31%	-16.71%	Bearish
Alternatives				
REITs	-12.18%	-9.94%	-28.13%	Neutral
Commodities	-5.91%	-6.26%	13.63%	Favorable
Managed Futures	6.60%	8.06%	29.81%	Favorable
Hedge Funds	-0.95%	0.53%	-4.54%	Favorable

Source: Morningstar, data as of 9/30/2022

S&P 500 Factor Returns 3Q2022



Source: Morningstar

Risk Examination – September 2022

A quarterly update on our views of the complex risk factors in global markets



Valuation

- Equity valuations have improved over the last quarter, but pressure remains on earnings. From a pure valuation standpoint, small cap stocks are trading at nearly a 30% discount to large cap stocks. Through this risk-off environment it may be too early to jump-in headfirst to this sector, but it may be time to slowly inch back in.



Earnings

- We believe the market will be entering an earnings recession this year as real economic growth slows. The other negative for earnings growth is that consensus forecasts are too optimistic. When this is the case, the market tends to punish those stocks that deliver negative earnings surprises.



Macroeconomic

- Our expectation of economic growth rates has moved lower as the effects of the Fed fighting off high inflation should result in a slowing labor market and higher debt servicing costs. All of this should sharply curtail household demand. Supply constraints are still present across many sectors due to the continued Covid lockdown in China and war in Ukraine. We believe this momentum will continue throughout the rest of the year suggesting that the US economy is much closer to a recession than previously forecasted.



Liabilities

- Liabilities have exploded on government and corporate balance sheets over the last cycle. Household borrowing rates are not far behind. The shift now should be on balance sheet repair and debt repayment and not on earnings growth and increased individual spending. This will likely place additional pressure on growth and governments to provide extra stimulus programs to re-start the global economy.

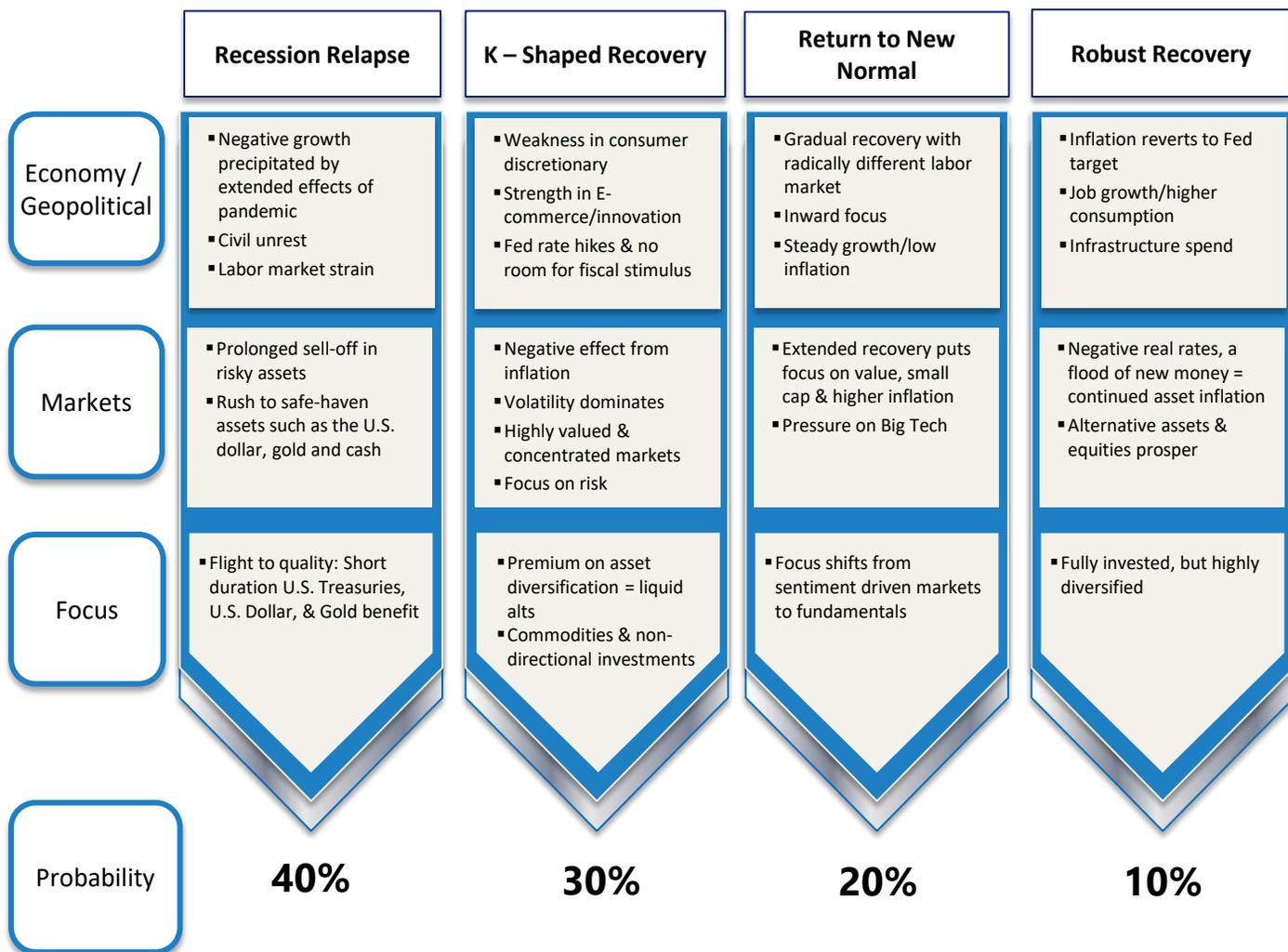


Technical/Sentiment

- The biggest driver of security price swings since COVID-19 has been investor psychology and sentiment, rather than investment or macroeconomic fundamentals. The radical uncertainty from the effects of the global virus pandemic, the crisis in Ukraine, rapidly rising headline inflation and the appropriate policy response has resulted in highly volatile equity and credit markets.
- In our view, many market participants do not really understand market risk as many have never experienced a 25%-50% drawdown in stock prices, nor a double-digit drawdown in bonds.

2022-2023 Economic and Investment Scenarios

Our assessment of potential macro scenarios



< < < **Downside** < < <

| > > > **Upside** > > >

Risks	Downside	Upside
	<ul style="list-style-type: none"> ◀ Pandemic variant emerges – more lockdowns ◀ Sustained high rates of inflation ◀ Civil unrest, supply chain disruptions and food shortages ◀ Runaway debt growth on pace to equal Japan ◀ Higher rates of poverty and social displacement ◀ Further job displacement – weak demand 	<ul style="list-style-type: none"> ▶ Effective use of fiscal stimulus spurs economic growth ▶ Globalization returns ▶ Labor market returns with shift in focus and higher productivity ▶ Strong real economic growth and productive use of credit ▶ Raises the wealth effect across multiple sectors ▶ Lower rates of inflation, above trend real growth

Portfolio Asset Class Positioning

PORTFOLIO SEGMENT / SEGMENT OBJECTIVE	SEGMENT CONSTITUENTS	SEGMENT COMMENTS
<p>Equity</p> <p><i>Diversified Exposure with premium on quality and lower volatility</i></p>	<ul style="list-style-type: none"> ▪ Global exposure to high quality companies and innovators in their field ▪ Diversified across size, high quality, low volatility and rising dividend payers across global markets 	<ul style="list-style-type: none"> ▪ Higher exposure to U.S. large-cap, mid-cap, small cap via equal-weighted index ▪ Emphasis on high dividend payers, low volatility and high quality across developed markets ▪ Continued emphasis on exposure to an actively managed basket of innovation stocks
<p>Fixed Income</p> <p><i>Seek to Preserve Capital, and Diversify Equity Exposure</i></p>	<ul style="list-style-type: none"> ▪ Overweight low duration and high quality ▪ Reduced exposure to fallen angels ▪ Not a time to “reach for yield” ▪ Exposure to asset-backed & asset-backed, and senior loans 	<ul style="list-style-type: none"> ▪ Bias toward short duration ▪ Favor high quality credit over rates ▪ Issuer selection critical ▪ Inflation protected short term T-bonds
<p>Opportunistic</p> <p><i>Highest Conviction Ideas Based on 12-24 Month Proprietary Forecasts</i></p>	<ul style="list-style-type: none"> ▪ Continued emphasis (but paired back) on disruptive innovation themes ranging from Cyber technologies to immunotherapies ▪ Active core innovation portfolio with systematic over-weight exposures to E-commerce, medical instruments, cloud computing & cybersecurity 	<ul style="list-style-type: none"> ▪ Reflects Palladium’s shorter-term model (value and momentum) ▪ Seeking participation in select themes with attractive return potential based on innovative technologies such as 3D printing, gene therapies, digital wallets, renewable energy and AI
<p>Alternative</p> <p><i>Anticipated Risk Mitigation with Alpha Opportunities</i></p>	<ul style="list-style-type: none"> ▪ Hedged Equity ▪ Merger Arbitrage ▪ Global Macro – Credit ▪ Carbon Credits ▪ Commodity Dynamic Roll Strategy ▪ Systematic L/S Managed Futures 	<ul style="list-style-type: none"> ▪ Lower than average return and higher risk expectations for equities and bonds presents the challenge of providing uncorrelated sources of risk and return. ▪ We favor exposure to risk-managed approaches to investing in liquid alternatives with an emphasis on M&A, Carbon Credits, Commodities, Absolute Return, Hedged Equity, & Managed Futures

All investments are subject to risk, including the loss of principal. For additional information about the Palladium Investment Portfolios, please refer to the Disclosures at the end of this report.

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Palladium has sole discretion to change allocations to styles and vehicles at any time.

Index definitions:

“U.S. Large Cap” represented by the S&P 500 Index.

“U.S. Small Cap” represented by the Russell 2000 Index.

“International” represented by the MSCI Europe, Australasia, Far East (EAFE) Net Return Index.

“Emerging” represented by the MSCI Emerging Markets Net Return Index.

“U.S. Aggregate” represented by the Bloomberg U.S. Aggregate Bond Index.

“U.S. Government” represented by the Bloomberg U.S. Government Bond Index.

“U.S. Corporate” represented by the Bloomberg U.S. Credit Bond Index.

“U.S. High Yield” represented by the Bloomberg U.S. Corporate High Yield Index.

“Non-U.S. Developed” represented by the S&P International Treasury ex U.S. Index.

“Emerging Market Debt” represented by the JP Morgan GBI-EM Global Core Index

“REITs” represented by the FTSE North American Real Estate Investment Trust (REIT) Equity REITs Index.

“Commodities” represented by the Dow Jones Commodity Index .

“Managed Futures” represented by the Credit Suisse Managed Futures Index.

“Global Macro” represented by the Credit Suisse Global Macro Index

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