Current Investment Strategy and Themes

- ***Income producing strategies remain at risk of rising interest rates and inflation.***
- ***Equities are highly valued and at risk of rising interest rates or a deceleration of earnings.***
- ***Diversified bond niche opportunities exist, equities are balanced with broad exposures and long-term secular trends.***

The Markets in Review: December 2021

- The markets in December 2021 mostly mirrored the trends experienced throughout the year. While the S&P 500 was narrowly outperformed by the MSCI EAFE index in December, the US market dominated global equity markets in the 4th quarter and full year 2021. For a variety of economic, political and currency related reasons, investors exited Emerging Markets equities in 2021 and pushed EM returns negative.
- The simplest explanation of equity markets is that the S&P 500's largest companies dominate performance. Statistically, the market is more concentrated than ever in these largest, or mega-cap, companies. Their return pattern has an outsized effect on total market returns. The impact has been to lull investors into assuming stocks are lower risk than warranted. This is not the first-time markets have been extremely concentrated in the ten or so largest names. In the early 1970s, it was called the Nifty-Fifty, then it was IBM, ATT and Big Oil, and then it was the Telecom and Tech craze of the late 1990s. Each period was known as single-decision investing. Buy the biggest and best, put them away and forget them; auto-pilot investing. Each of these periods ended badly.
- The US equity dominance of the last and several years has been exacerbated by the negative returns in bond markets. The absolute low interest rates generate negative total returns from any rise in interest rates. The math of bonds works against investors at these levels. Rising inflation is pushing the negative total bond market returns even lower. The real return on bonds is approaching double digit declines.
- Capital markets move into 2022 with several past trends at risk. The Federal Reserve has maintained a near zero interest rate policy since the financial market panic of 2007-2009. Used in combination with an asset purchase monetary policy, they pumped trillions of dollars into the financial system. Both policies are under review and will likely change. The "FED" now must fight the rising inflation threat. The wealth effect (the combined value of investors' portfolios and real estate) also propped up the economy. The wealth effect from investors' rising losses on the real value of their bond holdings is another risk to the economy.
- The combination of the rising wealth effect, diminished risk perceptions, and renewed inflation is sending investors into commodities and cryptocurrency. Commodity markets are comprised of Agricultural, Metals, and Energy prices. Rarely do each of these sectors move in tandem. In 2021, WTI Oil rose 56.4% and silver fell -11.7%. Cryptocurrencies are still dominated by pure price speculators moving from one currency to the next. In 2021, Etherium rose 398.3%, Solana +11,177.8%, and Avalanche +3,334.8%. Bitcoin, the oldest and most stable, rose only 59.8% in 2021, but still suffered two drawdowns of -53% and -33%.

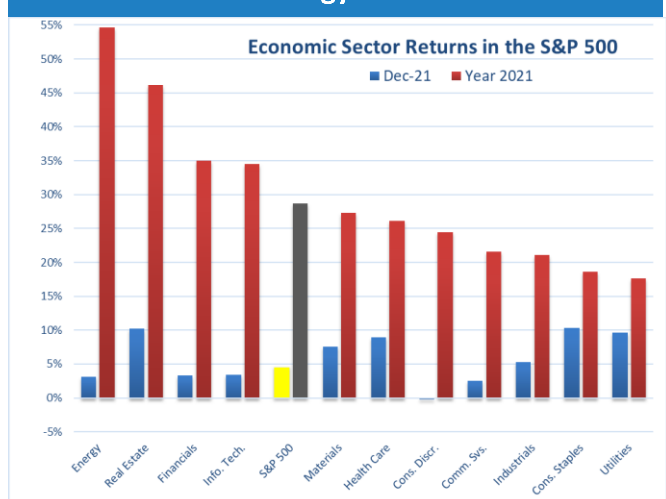
Key Market Indicators

Bullish	Favorable	Neutral	Cautious	Bearish

Equities	Dec 2021	4th Qtr 2021	Year 2021	Current View
U.S. Large Cap	4.48%	11.03%	28.71%	Neutral
U.S. Small Cap	2.23%	2.14%	14.82%	Cautious
International Developed	5.12%	2.69%	11.26%	Favorable
Emerging Markets Equity	1.88%	-1.31%	-2.54%	Neutral
Fixed Income				
U.S. Aggregate	-0.26%	0.01%	-1.54%	Cautious
U.S. Government	-0.51%	0.15%	-2.28%	Cautious
U.S. Corporate	-0.08%	0.22%	-1.08%	Neutral
U.S. High Yield	1.87%	0.71%	5.28%	Cautious
Non-U.S. Developed	-0.45%	-1.74%	-9.51%	Cautious
Emerging Market Debt	1.21%	-3.19%	-9.23%	Bearish
Alternatives				
REITs	8.83%	16.31%	43.24%	Neutral
Commodities	5.80%	2.93%	30.81%	Favorable
Managed Futures	-0.54%	-3.12%	7.50%	Neutral
Hedge Funds	0.47%	0.07%	3.65%	Favorable

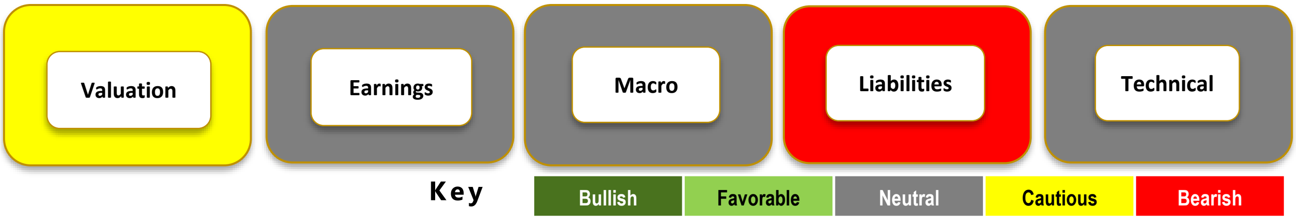
Source: Morningstar, data as of 12/31/2021

Sector Returns: Energy Stocks lead the S&P



Risk Examination – December 2021

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



Valuation

- Global asset valuations remain high in cap-weighted indexes with the majority of beta risk being driven by technology stocks. Superior earnings results were powered by large tech stocks during 2021 despite record valuations.

Earnings

- The quick bounceback in the economy from the initial COVID shock resulted in abnormally higher than normal earnings. The challenge now remains whether these same companies can continue to deliver superior earnings in the face of higher inflation and the economic effects of the new Omicron variant.

Macroeconomic

- Financial suppression resulting in negative real interest rates and an excessive debt burden has created even greater economic inequality, rampant asset inflation and little room for policy error moving forward. Growth should moderate from recent levels and real rates are most likely to remain negative with the burden of debt being pushed even further down the road.

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 with the onset of the global virus pandemic 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%-40% drawdown in stock prices.

2021 – 2022 Economic and Investment Scenarios

Our assessment of potential macro scenarios

	Recession Relapse	K – Shaped Recovery	Return to New Normal	Robust Recovery
Economy / Geopolitical	▪ Negative growth precipitated by extended effects of pandemic ▪ Civil unrest ▪ Labor market strain	▪ Weakness in leisure & hospitality, commercial real estate ▪ Strength in E-commerce/innovation ▪ Helicopter money	▪ Gradual recovery with radically different labor market ▪ Inward focus ▪ Steady growth/low inflation	▪ Quick track to herd immunity = quicker recovery ▪ Job growth/higher consumption ▪ Infrastructure spend
Markets	▪ Prolonged sell-off in risky assets ▪ Rush to safe-haven assets such as digital currency, gold and cash	▪ Bifurcated market gains ▪ Volatility dominates ▪ Traditional markets remain undiversified ▪ Highly valued & concentrated markets	▪ Extended recovery puts focus on value, small cap & higher inflation ▪ Pressure on Big Tech	▪ Negative real rates, a flood of new money = continued asset inflation ▪ Alternative assets & equities prosper
Focus	▪ Flight to quality: U.S. Treasuries, U.S. Dollar, Crypto Currencies & Gold benefit	▪ Premium on asset diversification ▪ Innovation, risk-managed crypto & gold are a major diversifier	▪ Focus shifts from sentiment driven markets to fundamentals	▪ Fully invested, but highly diversified
Probability	**15%**	**50%**	**25%**	**10%**

Risks

< < < Downside < < < | **> > > Upside > > >**

Downside

- Pandemic rages into fall/winter – new variants
- 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

Upside

- 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

Portfolio Asset Class Positioning

PORTFOLIO SEGMENT / SEGMENT OBJECTIVE	SEGMENT CONSTITUENTS	SEGMENT COMMENTS
Equity *Low-Cost, Systematic, and Factor Exposure*	▪ Global systematic equity beta exposure to investment & economic fundamentals ▪ Emphasis on diversified market exposure both in U.S. and non-U.S. markets with no one dominant factor tilt	▪ Higher exposure to U.S. mid cap and global small cap ▪ Favor higher growth regions and sectors with attractive valuations ▪ Longer-term, market driven by value, but in shorter-term growth and momentum can dominate
Fixed Income *Seek to Preserve Capital, and Diversify Equity Exposure*	▪ Overweight low duration and high quality ▪ Continued exposure to fallen angels ▪ Not a time to "reach for yield" ▪ Exposure to asset-backed & private mortgages	▪ Favor intermediate duration or less ▪ Favor quality credit over rates ▪ Selective, short duration high yield ▪ Issuer selection critical ▪ BBB segment is crowded
Opportunistic *Highest Conviction Ideas Based on 12-24 Month Proprietary Forecasts*	▪ Emphasis on disruptive innovation themes ranging from 3D technologies to immunotherapies ▪ Active core innovation portfolio with systematic over-weight exposures to E-commerce, medical instruments, cloud computing & cybersecurity	▪ Reflects Palladiem'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
Alternative *Anticipated Risk Mitigation with Alpha Opportunities*	▪ Risk Managed Digital Assets ▪ Hedged Equity ▪ Merger Arbitrage ▪ Global Macro – Credit ▪ Carbon Credits	▪ 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 cryptocurrencies & blockchain technology. Also favor exposure to global carbon credits

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

Important Disclosures

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It is important to remember that there are risks inherent in any investment and that there is no assurance that any investment, asset class, style or index will provide positive performance over time. Diversification and strategic asset allocation do not guarantee a profit or protect against a loss in a declining m]

markets. Past performance is not a guarantee of future results. All investments are subject to risk, including the loss of principal. Portfolio positions referenced are subject to change at any time, your portfolio may not reflect the information referenced.

Palladiem 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

Palladiem, LLC is a Registered Investment Adviser.

For more information about Palladiem, as well as its products, fees and services, please refer to Palladiem’s website, www.palladiem.com or call us at 888-886-4122; 610-304-6529