

## Overview

Palladium LLC, is a registered investment adviser and was founded in October 2011.

As of December 2021, \$752 Million Assets Under Management.

Independent, employee-owned firm.

Palladium is an investment manager with a focus on transparency and risk management.

### Equity Market Capitalization for Palladium Growth Endowment Current

Category	Weight
Large Cap	43.72%
Mid Cap	44.74%
Small Cap	11.54%

### Stock Sectors for Palladium Growth Endowment Current

Category	Weight
Basic Materials	5.05%
Consumer Cyclical	9.67%
Financial Services	11.53%
Real Estate	7.18%
Consumer Defensive	6.44%
Healthcare	11.53%
Utilities	5.80%
Communication Services	6.46%
Energy	4.12%
Industrials	10.31%
Technology	21.91%

### Fixed Income Credit Quality for Palladium Growth Endowment Current

Category	Weight
AAA	-29.39%
AA	3.20%
A	18.53%
BBB	30.22%
Non-Investment Grade	75.83%
Not Rated	1.61%

### Fixed Income Maturity for Palladium Growth Endowment Current

Category	Weight
Under 1 Year	2.02%
1 - 3 Years	-1.58%
3 - 5 Years	41.17%
5 - 7 Years	39.55%
7 - 10 Years	7.55%
10 - 15 Years	3.96%
15 - 20 Years	1.78%
20 - 30 Years	3.02%
Over 30 Years	2.53%

## Key Attributes

Multi-Asset Class

Liquidity & Transparency

Globally Diversified

Low Expenses & Fees

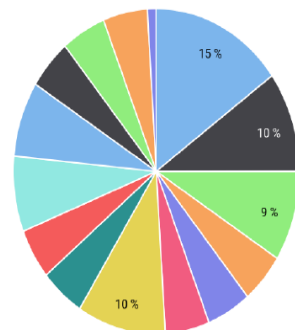
## Strategy Description

- The Growth Endowment Model Strategy seeks to provide long-term capital appreciation.
- This strategy is typically appropriate for an investor with a longer-term investment horizon and a moderate- to-high tolerance for risk seeking capital appreciation.

## Asset Allocation

### Palladium Growth Endowment Current

Ticker	Name	Allocation
EUSA	iShares MSCI USA Equal Weighted ETF	15.00%
SPHD	Invesco S&P 500 High Div Low Vol ETF	10.00%
SRLN	SPDR Blackstone Senior Loan ETF	9.00%
GIOIX	Guggenheim Macro Opportunities Instl	5.00%
JHEQX	JPMorgan Hedged Equity I	5.00%
CASHX	Cash	1.00%
IGSB	iShares 1-5 Year Invmt Grd Corp Bd ETF	5.00%
SCZ	iShares MSCI EAFE Small-Cap ETF	10.00%
IEMG	iShares Core MSCI Emerging Markets ETF	5.00%
SCHF	Schwab International Equity ETF	5.00%
COMT	iShares GSCI Cmd Dyn Roll Stgy ETF	7.50%
KMLM	KFA Mount Lucas Strategy ETF	7.50%
ARKK	ARK Innovation ETF	5.00%
CIBR	First Trust NASDAQ Cybersecurity ETF	5.00%
KRBN	KraneShares Global Carbon ETF	5.00%



## PCT PORTFOLIO SEGMENTS / CONSTITUENTS

- 39.0%** **Equity: Low-Cost, Systematic, and Factor Exposure**  
Systematic Equal Wtd U.S. Equity      Systematic U.S. Equity Hi Div Low Vol  
Systematic Non-U.S. Equity
- 15.0%** **Fixed Income / Cash: Seeks to Preserve Capital and Generate Income**  
Liquid Money Markets
- 30.0%** **Alternative: Anticipated Risk Mitigation with Alpha Opportunities**  
Commodities      Carbon Credits  
Systematic Managed Futures      Global Macro  
Hedged Equity
- 16.0%** **Opportunistic: Reflects Ideas Based on 12-24 Month Forecasts**  
Clean Technology      Cyber Security  
Emerging Market Equity      Innovative Technology  
Non US Small Cap Eq

Source: Morningstar & Portfolio Visualizer

\*Holdings are subject to change and may be different than at the time of this report or based on program constraints.

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## Portfolio Characteristics

Holdings Based Style Analysis for Palladium Growth Endowment Current

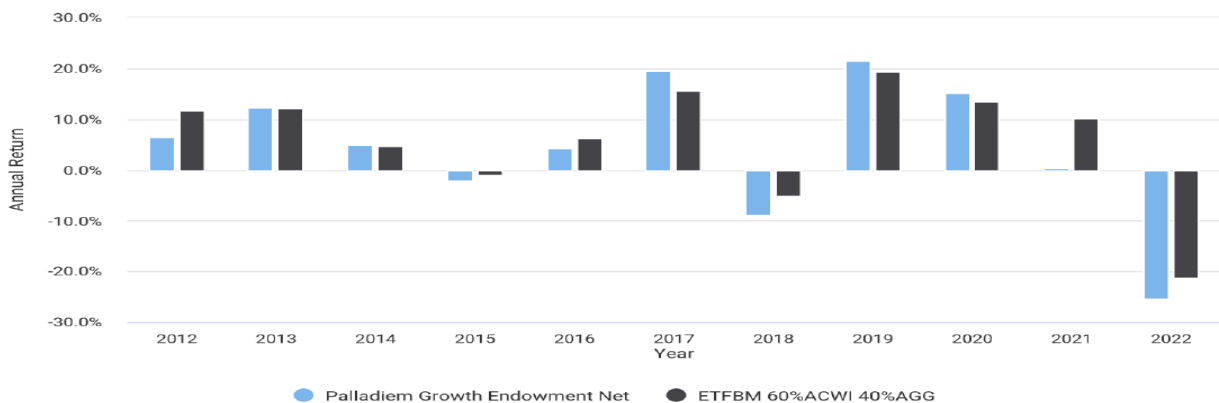
Ticker	Name	Category	Weight	SEC Yield	Expense Ratio		P/E	Duration
					Net	Gross		
EUSA	iShares MSCI USA Equal Weighted ETF	Large Blend	15.00%	1.75%	0.09%	0.09%	14.63	
SPHD	Invesco S&P 500 High Div Low Vol ETF	Large Value	10.00%	4.94%	0.30%	0.30%	14.22	
SRLN	SPDR Blackstone Senior Loan ETF	Bank Loan	9.00%	6.55%	0.70%	0.70%		0.20
GIOIX	Guggenheim Macro Opportunities Instl	Nontraditional Bond	5.00%	6.56%	1.00%	1.12%	13.19	2.69
JHEQX	JPMorgan Hedged Equity I	Options Trading	5.00%		0.58%	0.58%	20.48	
CASHX	Cash	Cash	1.00%					0.00
IGSB	iShares 1-5 Year invmt Grd Corp Bd ETF	Short-Term Bond	5.00%	4.89%	0.06%	0.06%		2.69
ARKK	ARK Innovation ETF	Mid-Cap Growth	5.00%		0.75%	0.75%		
SCZ	iShares MSCI EAFE Small-Cap ETF	Foreign Small/Mid Blend	10.00%	2.60%	0.39%	0.39%	10.00	
IEMG	iShares Core MSCI Emerging Markets ETF	Diversified Emerging Mkts	5.00%	3.09%	0.09%	0.09%	9.93	
KMLM	KFA Mount Lucas Strategy ETF	Systematic Trend	7.50%		0.92%	0.92%	23.98	
SCHF	Schwab International Equity ETF	Foreign Large Blend	5.00%	2.99%	0.06%	0.06%	11.25	
CIBR	First Trust NASDAQ Cybersecurity ETF	Technology	5.00%	0.28%	0.60%	0.60%	24.24	
COMT	iShares GSCI Cmd Dyn Roll Stgy ETF	Commodities Broad Basket	7.50%	2.01%	0.48%	0.48%		
KRBN	KraneShares Global Carbon ETF	Commodities Focused	5.00%		0.78%	0.78%		
			<b>100.00%</b>	<b>2.65%</b>	<b>0.45%</b>	<b>0.46%</b>	<b>15.36</b>	<b>1.44</b>

### Growth Chart



The chart represents the growth of a hypothetical investment of \$10,000 in the strategy since inception and reflects the reinvestment of dividends and income. The chart does not represent an actual investment and is not intended to imply future results.

### Annual Returns



Source: Portfolio Visualizer (Model Returns)

\* Inception Date: 1/1/2012

Palladium strategy (net 0.55% fee). Benchmarks: 60% iShares MSCI All Country World Index ETF (ACWI net 0.32% fee), and 40% iShares Bloomberg US Aggregate Bond Index ETF (AGG net 0.03% fee). Benchmarks represent asset classes that may be included in the strategy and are presented to provide perspective on the strategy's historical risk, as measured by standard deviation, in relation to these asset classes. ACWI (ETF) represents the MSCI All Country World Equity Index and the AGG (ETF) represents the Bloomberg Barclays Capital US Aggregate Bond index. You cannot invest directly in an index.

### Risk and Return Metrics (Jan 2012 - Sep 2022)

Metric	Palladium Growth Endowment Net	ETFBM 60%ACWI 40%AGG
Arithmetic Mean (monthly)	0.35%	0.48%
Arithmetic Mean (annualized)	4.24%	5.90%
Geometric Mean (monthly)	0.29%	0.45%
Geometric Mean (annualized)	3.58%	5.49%
Standard Deviation (monthly)	3.25%	2.56%
Standard Deviation (annualized)	11.27%	8.87%
Downside Deviation (monthly)	2.30%	1.74%
Maximum Drawdown	-28.59%	-21.23%
Stock Market Correlation	0.94	0.95
Beta (*)	1.20	1.00
Alpha (annualized)	-2.76%	-0.00%
R Squared	89.80%	100.00%

### Palladium Growth Endowment Net Returns

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2012	3.30%	1.98%	0.18%	-0.49%	-4.10%	2.29%	1.45%	0.74%	0.96%	-1.03%	0.56%	0.51%	6.34%
2013	2.50%	-0.20%	1.69%	1.92%	-1.38%	-2.66%	3.25%	-1.56%	3.45%	2.46%	0.94%	1.51%	12.36%
2014	-2.77%	3.81%	-0.29%	0.16%	1.88%	2.39%	-1.38%	2.84%	-3.67%	1.65%	1.18%	-0.66%	4.96%
2015	-0.61%	3.73%	-0.96%	0.90%	0.53%	-1.99%	0.55%	-5.38%	-2.88%	5.71%	0.16%	-1.49%	-2.17%
2016	-5.90%	-0.69%	5.69%	0.81%	0.67%	0.12%	3.23%	-0.42%	0.67%	-2.15%	1.31%	1.18%	4.18%
2017	2.49%	2.45%	0.77%	1.20%	1.49%	0.41%	2.15%	0.41%	1.71%	2.07%	1.45%	1.47%	19.59%
2018	5.04%	-3.74%	-1.32%	-0.07%	0.86%	-1.00%	2.27%	1.01%	0.06%	-7.12%	1.30%	-5.91%	-8.90%
2019	7.49%	2.46%	1.00%	2.62%	-5.93%	6.47%	-0.32%	-2.19%	2.15%	1.93%	2.16%	2.43%	21.45%
2020	-1.26%	-6.08%	-11.78%	9.25%	3.57%	2.77%	5.24%	4.57%	-1.73%	-1.38%	8.86%	4.34%	15.24%
2021	0.34%	-0.84%	0.14%	0.20%	0.58%	2.88%	-0.63%	2.18%	-4.05%	3.62%	-4.49%	0.83%	0.42%
2022	-6.80%	-2.64%	-0.87%	-5.33%	-0.24%	-6.11%	3.17%	-1.62%	-7.86%				-25.41%

Annual return for 2022 is from 01/01/2022 to 09/30/2022

### ETFBM 60%ACWI 40%AGG Returns

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2012	3.58%	2.96%	0.44%	-0.32%	-5.14%	3.06%	1.04%	1.67%	1.73%	-0.33%	1.06%	1.64%	11.68%
2013	2.01%	0.18%	1.13%	2.09%	-1.03%	-2.19%	2.86%	-1.71%	3.77%	2.70%	0.83%	1.01%	12.08%
2014	-2.16%	3.27%	0.28%	1.04%	1.67%	1.07%	-0.97%	2.01%	-2.24%	1.15%	1.09%	-1.36%	4.79%
2015	0.03%	2.95%	-0.73%	1.59%	-0.17%	-1.98%	0.84%	-4.22%	-1.74%	4.62%	-0.48%	-1.35%	-0.92%
2016	-2.69%	-0.39%	4.79%	0.90%	0.21%	0.75%	2.48%	0.12%	0.58%	-1.47%	-0.41%	1.28%	6.12%
2017	1.83%	1.77%	0.79%	1.33%	1.60%	0.47%	1.77%	0.62%	0.90%	1.33%	1.15%	1.05%	15.61%
2018	2.97%	-3.09%	-0.63%	-0.13%	0.55%	-0.31%	1.83%	0.64%	0.12%	-4.72%	1.16%	-3.44%	-5.20%
2019	5.19%	1.43%	1.80%	1.97%	-2.88%	4.33%	0.11%	-0.21%	1.10%	1.73%	1.39%	2.04%	19.30%
2020	-0.05%	-3.86%	-8.26%	6.59%	3.32%	2.02%	3.75%	3.29%	-1.81%	-1.56%	7.54%	2.85%	13.47%
2021	-0.48%	0.77%	1.25%	2.84%	0.96%	1.09%	0.99%	1.22%	-2.90%	3.23%	-1.28%	2.20%	10.18%
2022	-3.53%	-2.29%	0.04%	-6.36%	0.57%	-5.47%	5.26%	-3.84%	-7.29%				-21.23%

Annual return for 2022 is from 01/01/2022 to 09/30/2022

Source: Portfolio Visualizer (Model Returns)

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