

## 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	42.13%
Mid Cap	43.92%
Small Cap	13.95%

### Stock Sectors for Palladium Growth Endowment Current

Category	Weight
Basic Materials	4.36%
Consumer Cyclical	14.74%
Financial Services	10.43%
Real Estate	5.38%
Consumer Defensive	5.89%
Healthcare	10.89%
Utilities	4.45%
Communication Services	7.51%
Energy	3.15%
Industrials	10.27%
Technology	22.94%

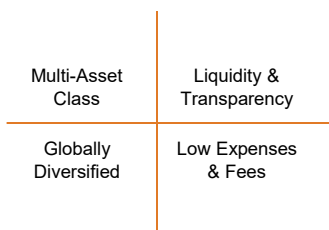
### Fixed Income Credit Quality for Palladium Growth Endowment Current

Category	Weight
AAA	0.82%
AA	3.22%
A	14.79%
BBB	19.64%
Non-Investment Grade	60.08%
Not Rated	1.44%

### Fixed Income Maturity for Palladium Growth Endowment Current

Category	Weight
Under 1 Year	0.09%
1 - 3 Years	21.02%
3 - 5 Years	33.77%
5 - 7 Years	30.61%
7 - 10 Years	6.60%
10 - 15 Years	2.49%
15 - 20 Years	1.57%
20 - 30 Years	2.06%
Over 30 Years	1.80%

## Key Attributes



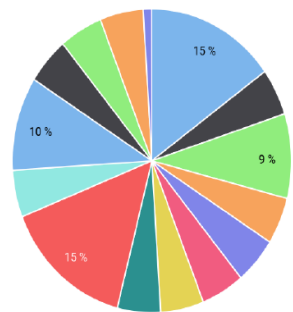
## Strategy Description

- 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	5.00%
SRLN	SPDR Blackstone Senior Loan ETF	9.00%
IGSB	iShares 1-5 Year invmt Grd Corp Bd ETF	5.00%
GIOIX	Guggenheim Macro Opportunities Instl	5.00%
JHEQX	JPMorgan Hedged Equity I	5.00%
CASHX	Cash	1.00%
ARKK	ARK Innovation ETF	5.00%
CIBR	First Trust NASDAQ Cybersecurity ETF	5.00%
COMT	iShares GSCI Cmd Dyn Roll Stgy ETF	15.00%
KRBN	KraneShares Global Carbon 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%
IBUY	Amplify Online Retail ETF	5.00%



## PCT PORTFOLIO SEGMENTS / CONSTITUENTS

- 25.0%** **Equity: Low-Cost, Systematic**  
Systematic U.S. Equity - Equal Wtd  
Systematic Non-U.S. Equity
- 15.0%** **Fixed Income: Seeks to Preserve Capital and Generate Income**  
Senior Loans  
Asset Backed
- 30.0%** **Alternative: Anticipated Risk Mitigation with Alpha Opportunities**  
Global Macro Credit  
Carbon Credits  
Diversified Commodities
- 30.0%** **Opportunistic: Reflects Ideas Based on 12-24 Month Forecasts**  
Emerging Market Equity  
Disruptive Innovation  
Cyber Security  
Small Cap International  
E-Commerce  
Cloud Computing

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.

©2022 Palladium LLC. Palladium has sole discretion to change allocations to styles and vehicles at any time. All investments are subject to risk, including the loss of principal. For additional information, please refer to the Disclosures at the end of this report.

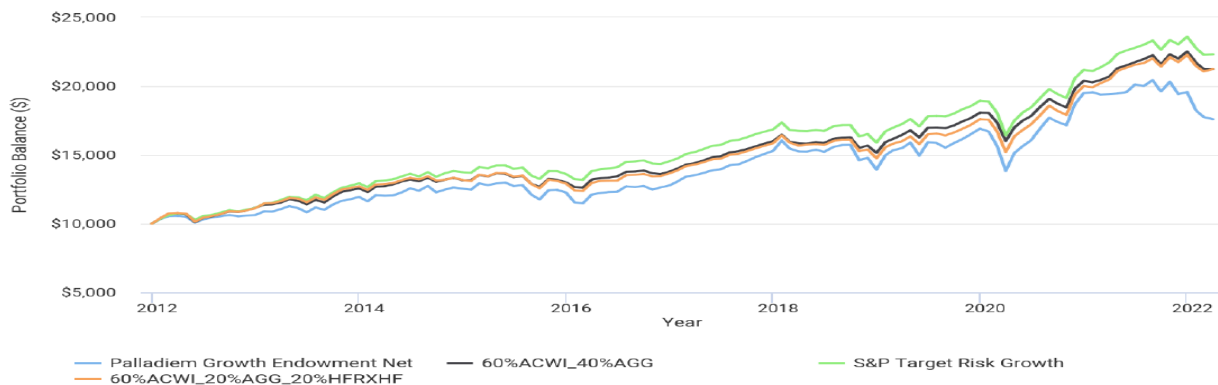
Palladium LLC is a Registered Investment Adviser. **Approved for End Client Use.**

## Portfolio Characteristics

Holdings Based Style Analysis for Palladium Growth Endowment Current

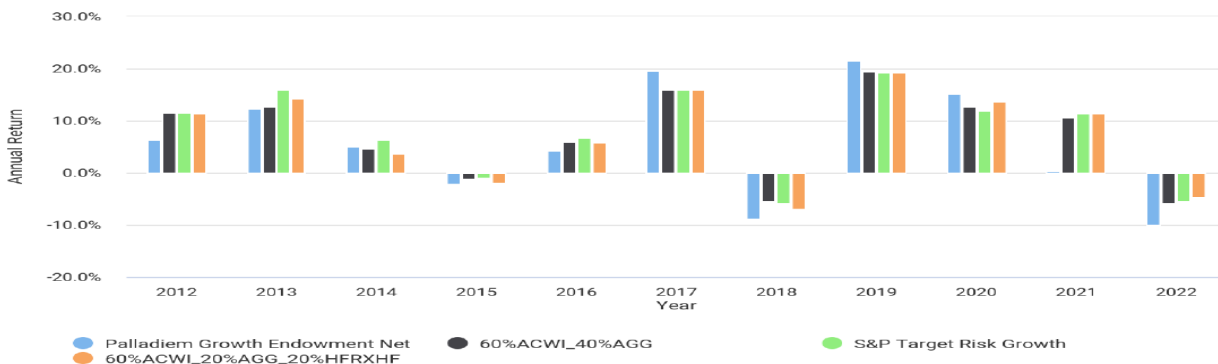
Ticker	Name	Category	Weight	SEC Yield	Expense Ratio		P/E	Duration
					Net	Gross		
EUSA	iShares MSCI USA Equal Weighted ETF	Large Blend	15.00%	1.35%	0.09%	0.09%	18.79	
SPHD	Invesco S&P 500 High Div Low Vol ETF	Large Value	5.00%	3.59%	0.30%	0.30%	18.67	
SRLN	SPDR Blackstone Senior Loan ETF	Bank Loan	9.00%	4.12%	0.70%	0.70%		0.30
IGSB	iShares 1-5 Year Invmt Grd Corp Bd ETF	Short-Term Bond	5.00%	2.89%	0.06%	0.06%		2.75
GIOIX	Guggenheim Macro Opportunities Instl	Nontraditional Bond	5.00%	3.34%	1.00%	1.12%		2.15
JHEQX	JPMorgan Hedged Equity I	Options Trading	5.00%		0.58%	0.58%	21.68	
CASHX	Cash	Cash	1.00%					0.00
ARKK	ARK Innovation ETF	Mid-Cap Growth	5.00%		0.75%	0.75%		
CIBR	First Trust NASDAQ Cybersecurity ETF	Technology	5.00%		0.60%	0.60%		
COMT	iShares GSCI Cmd Dyn Roll Stgy ETF	Commodities Broad Basket	15.00%	-0.10%	0.48%	0.48%	4.14	
KRBN	KraneShares Global Carbon ETF	Commodities Focused	5.00%		0.78%	0.78%		
SCZ	iShares MSCI EAFE Small-Cap ETF	Foreign Small/Mid Blend	10.00%	1.80%	0.39%	0.39%	13.04	
IEMG	iShares Core MSCI Emerging Markets ETF	Diversified Emerging Mkts	5.00%	2.10%	0.09%	0.09%	12.15	
SCHF	Schwab International Equity ETF	Foreign Large Blend	5.00%	2.26%	0.06%	0.06%	14.02	
IBUY	Amplify Online Retail ETF	Consumer Cyclical	5.00%		0.65%	0.65%		
			100.00%	1.45%	0.44%	0.44%	13.45	1.36

## 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)

Benchmark: 60% MSCI All Country World Index (ACWI) Net Return/20% AGG Bloomberg Barclays Capital US Aggregate Bond Index/ 20% HFRXHF; 60% (ACWI) and 40% (Agg); S&P Target Risk Growth. Indices 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. HFRXHF represents the Hedge Fund Research Global Hedge Fund Index; AGG represents the Bloomberg Barclays Capital US Aggregate Bond Index; ACWI represents the MSCI All Country World Equity Index. S&P Target Risk Growth represents a 60% S&P Total Equity Index and 40% S&P Total Bond Index. You can not invest directly in an index.

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

Metric	Palladium Growth Endowment Net	60%ACWI_40%AGG	S&P Target Risk Growth	60%ACWI_20%AGG_20%HRFXHF
Arithmetic Mean (monthly)	0.51%	0.64%	0.68%	0.65%
Arithmetic Mean (annualized)	6.29%	7.96%	8.50%	8.03%
Geometric Mean (monthly)	0.46%	0.61%	0.65%	0.61%
Geometric Mean (annualized)	5.67%	7.62%	8.14%	7.63%
Standard Deviation (monthly)	3.14%	2.30%	2.34%	2.51%
Standard Deviation (annualized)	10.86%	7.96%	8.12%	8.70%
Downside Deviation (monthly)	2.12%	1.44%	1.48%	1.59%
Maximum Drawdown	-18.19%	-11.39%	-13.29%	-13.56%
Stock Market Correlation	0.94	0.94	0.96	0.96
Beta (*)	1.20	0.91	0.92	1.00
Alpha (annualized)	-3.17%	0.66%	1.05%	0.00%
R Squared	92.31%	98.10%	97.59%	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%										-10.05%

Annual return for 2022 is from 01/01/2022 to 03/31/2022

### 60%ACWI\_40%AGG Returns

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2012	3.58%	3.02%	0.48%	-0.38%	-5.36%	3.04%	1.03%	1.69%	1.76%	-0.34%	1.09%	1.70%	11.57%
2013	2.01%	0.17%	1.15%	2.11%	-1.00%	-2.22%	2.93%	-1.75%	3.88%	2.81%	0.91%	1.13%	12.60%
2014	-2.16%	3.20%	0.28%	1.04%	1.67%	1.07%	-0.97%	2.01%	-2.25%	1.15%	1.09%	-1.37%	4.70%
2015	0.03%	2.90%	-0.74%	1.60%	-0.17%	-1.99%	0.84%	-4.27%	-1.70%	4.48%	-0.48%	-1.34%	-1.13%
2016	-2.69%	-0.36%	4.65%	0.90%	0.20%	0.75%	2.46%	0.12%	0.59%	-1.48%	-0.40%	1.30%	6.01%
2017	1.83%	1.78%	0.80%	1.34%	1.62%	0.49%	1.82%	0.60%	0.96%	1.39%	1.23%	1.09%	16.00%
2018	2.97%	-3.14%	-0.65%	-0.13%	0.55%	-0.31%	1.84%	0.65%	0.13%	-4.81%	1.16%	-3.43%	-5.33%
2019	5.19%	1.48%	1.78%	2.05%	-3.11%	4.39%	0.11%	-0.32%	1.13%	1.77%	1.44%	2.14%	19.33%
2020	-0.05%	-3.78%	-7.86%	6.05%	3.12%	1.94%	3.63%	3.14%	-1.80%	-1.54%	7.37%	2.89%	12.78%
2021	-0.48%	0.77%	1.29%	2.91%	1.00%	1.10%	0.99%	1.30%	-3.02%	3.39%	-1.38%	2.34%	10.51%
2022	-3.53%	-2.28%	-0.01%										-5.74%

Annual return for 2022 is from 01/01/2022 to 03/31/2022

Source: Portfolio Visualizer (Model Returns)

Benchmark: 60% (ACWI) and 40% (Agg). Indices 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 represents the MSCI All World Equity Index and AGG represents the Bloomberg Barclays Capital US Aggregate Bond Index. You can not invest directly in an index.

Disclosures: The performance returns shown represent the results of a model portfolio of the investment strategy only and do not represent the results of actual trading of investor assets. The model performance has inherent limitations. Palladium maintains the model and calculates the model performance shown or discussed, but it does not represent actual assets. Thus, the performance shown or discussed does not reflect the impact that material economic and market factors had or might have had on decision making if actual investor money had been managed. While model performance may have performed better than the benchmark for some or all of the periods shown, the performance during any other period may not have, and there is no assurance that model performance will perform better than the benchmark in the future. An investor's actual account is managed by the investor or by an advisor based on the model portfolio, but the actual composition and performance of the account may differ from those of the model portfolio due to differences in the timing and prices of trades, and the identity and weightings of securities holdings. Portfolio performance assumes reinvestment of dividends and capital gains and is net of standard advisory fees payable to Palladium LLC (0.55%) but does not include any other expenses not covered by the advisory fee, which will reduce a client's return. Index returns assume the reinvestment of dividends and capital gains. Past performance is no guarantee of future results.

The statements contained herein are based upon the opinions of Palladium LLC (Palladium) and the data available at the time of publication and are subject to change at any time without notice. This communication does not constitute investment advice and is for informational purposes only, is not intended to meet the objectives or suitability requirements of any specific individual or account, and does not provide a guarantee that the investment objective of any model will be met. An investor should assess his/her own investment needs based on his/her own financial circumstances and investment objectives. Neither the information nor any opinions expressed herein should be construed as a solicitation or a recommendation by Palladium or its affiliates to buy or sell any securities or investments or hire any specific manager. The information contained herein has been obtained from sources that are believed to be reliable.

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 declining markets. All investments are subject to risk, including the loss of principal. For more information about Palladium, as well as its products, fees and services, please refer to Palladium's Form ADV Part 2, which may be obtained through your financial advisor or by writing to Palladium.

Palladium, LLC – 1 Town Place, Suite 200, Bryn Mawr, PA 19010 – (484)320-8809 - [info@palladium.com](mailto:info@palladium.com) - [www.palladium.com](http://www.palladium.com)