

## 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 Defensive Endowment Current

Category	Weight
Large Cap	52.22%
Mid Cap	38.47%
Small Cap	9.31%

### Stock Sectors for Palladium Defensive Endowment Current

Category	Weight
Basic Materials	3.15%
Consumer Cyclical	8.74%
Financial Services	13.82%
Real Estate	7.81%
Consumer Defensive	5.99%
Healthcare	14.07%
Utilities	6.13%
Communication Services	7.53%
Energy	3.69%
Industrials	10.43%
Technology	18.64%

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

Category	Weight
AAA	40.56%
AA	1.67%
A	9.77%
BBB	14.42%
Non-Investment Grade	33.03%
Not Rated	0.55%

### Fixed Income Maturity for Palladium Defensive Endowment Current

Category	Weight
Under 1 Year	6.78%
1 - 3 Years	29.11%
3 - 5 Years	35.69%
5 - 7 Years	18.85%
7 - 10 Years	4.72%
10 - 15 Years	1.17%
15 - 20 Years	0.82%
20 - 30 Years	2.10%
Over 30 Years	0.77%

## Key Attributes

Multi-Asset Class

Liquidity & Transparency

Globally Diversified

Low Expenses & Fees

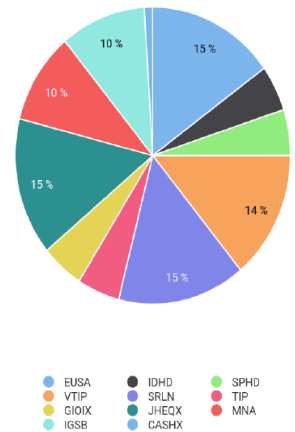
## Strategy Description

- The Defensive Endowment Model Strategy seeks to balance capital preservation and long-term growth with low-to-moderate volatility.
- This strategy is typically appropriate for an investor with a short-to-intermediate-term investment horizon and a low-to-moderate tolerance for risk, seeking preservation of capital with the potential for longer-term growth.

## Asset Allocation

### Palladium Defensive Endowment Current

Ticker	Name	Allocation
EUSA	iShares MSCI USA Equal Weighted ETF	15.00%
IDHD	Invesco S&P Intl Dev Hi Div Low Vol ETF	5.00%
SPHD	Invesco S&P 500 High Div Low Vol ETF	5.00%
VTIP	Vanguard Short-Term Inff-Prot Secs ETF	14.00%
SRLN	SPDR Blackstone Senior Loan ETF	15.00%
TIP	iShares TIPS Bond ETF	5.00%
GIOIX	Guggenheim Macro Opportunities Instl	5.00%
JHEQX	JPMorgan Hedged Equity I	15.00%
MNA	IQ Merger Arbitrage ETF	10.00%
CASHX	Cash	1.00%
IGSB	iShares 1-5 Year Invmt Grd Corp Bd ETF	10.00%



## PCT PORTFOLIO SEGMENTS / CONSTITUENTS

- 25.0%** **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 Hi Div Low Vol
- 45.0%** **Fixed Income / Cash: Seeks to Preserve Capital and Generate Income**
  - Liquid Money Markets
  - Sr Bank Loans
  - TIPs
  - Asset Backed Securities
- 30.0%** **Alternative: Anticipated Risk Mitigation with Alpha Opportunities**
  - Global Macro
  - Hedged Equity
  - Merger Arbitrage

Source: Morningstar.

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

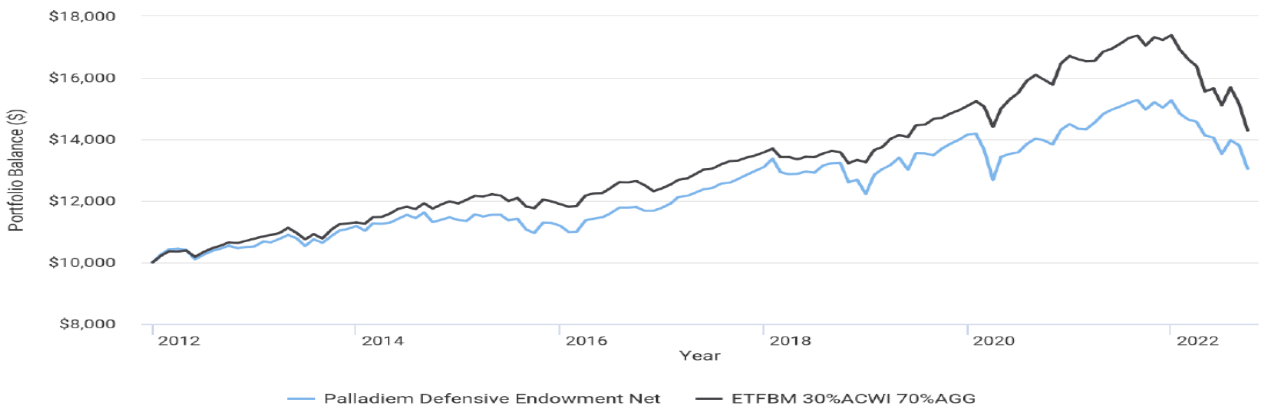
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Palladium LLC is a Registered Investment Adviser. **Approved for End Client Use.**

## Portfolio Characteristics

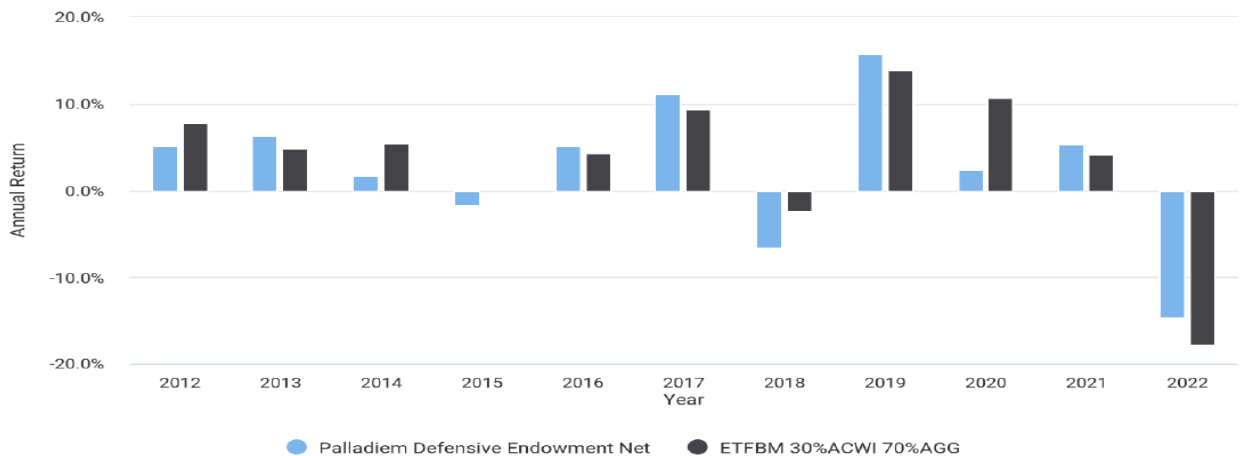
Ticker	Name	Category	Weight	SEC Yield	Expense Ratio		P/E	Duration
					Net	Gross		
EUSA	iShares MSCI USA Equal Weighted ETF	Large Blend	15.00%	1.75%	0.09%	0.09%	14.63	
IDHD	Invesco S&P Intl Dev Hi Div Low Vol ETF	Foreign Large Value	5.00%	5.11%	0.30%	0.30%	11.96	
SPHD	Invesco S&P 500 High Div Low Vol ETF	Large Value	5.00%	4.94%	0.30%	0.30%	14.22	
VTIP	Vanguard Short-Term Infl-Prot Secs ETF	Inflation-Protected Bond	14.00%	1.67%	0.04%	0.04%		2.58
SRLN	SPDR Blackstone Senior Loan ETF	Bank Loan	15.00%	6.55%	0.70%	0.70%		0.20
TIP	iShares TIPS Bond ETF	Inflation-Protected Bond	5.00%	1.63%	0.19%	0.19%		6.82
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	15.00%		0.58%	0.58%	20.48	
MNA	IQ Merger Arbitrage ETF	Event Driven	10.00%	-0.18%	0.76%	0.76%	19.62	
CASHX	Cash	Cash	1.00%					0.00
IGSB	iShares 1-5 Year invmt Grd Corp Bd ETF	Short-Term Bond	10.00%	4.89%	0.06%	0.06%		2.69
			100.00%	2.86%	0.39%	0.39%	16.72	2.27

## 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: 30% iShares MSCI All Country World Index ETF (ACWI net 0.32% fee), and 70% 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 Defensive Endowment Net	ETFBM 30%ACWI 70%AGG
Arithmetic Mean (monthly)	0.22%	0.29%
Arithmetic Mean (annualized)	2.72%	3.53%
Geometric Mean (monthly)	0.21%	0.28%
Geometric Mean (annualized)	2.50%	3.38%
Standard Deviation (monthly)	1.90%	1.60%
Standard Deviation (annualized)	6.58%	5.54%
Downside Deviation (monthly)	1.37%	1.12%
Maximum Drawdown	-14.63%	-17.82%
Stock Market Correlation	0.93	0.84
Beta (*)	1.06	1.00
Alpha (annualized)	-1.00%	-0.00%
R Squared	79.78%	100.00%

### Palladium Defensive Endowment Net Returns

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2012	2.64%	1.60%	0.17%	-0.37%	-2.94%	1.38%	1.31%	0.73%	0.90%	-0.79%	0.40%	0.18%	5.20%
2013	1.52%	-0.25%	1.11%	1.16%	-1.01%	-2.35%	2.10%	-1.08%	1.92%	1.75%	0.51%	0.86%	6.31%
2014	-1.40%	2.24%	-0.11%	0.29%	1.14%	1.08%	-0.94%	1.59%	-2.62%	0.62%	0.72%	-0.78%	1.73%
2015	-0.22%	1.82%	-0.59%	0.49%	0.03%	-1.60%	0.49%	-3.06%	-1.07%	3.10%	-0.06%	-0.83%	-1.61%
2016	-1.86%	0.12%	3.35%	0.50%	0.37%	1.17%	1.58%	-0.00%	0.13%	-1.06%	0.02%	0.89%	5.23%
2017	1.19%	1.74%	0.30%	0.90%	0.90%	0.31%	1.11%	0.28%	0.97%	1.04%	0.99%	0.93%	11.18%
2018	2.11%	-3.28%	-0.52%	0.11%	0.57%	-0.32%	1.86%	0.53%	0.13%	-4.80%	0.69%	-3.67%	-6.65%
2019	5.08%	1.42%	1.10%	1.76%	-2.91%	4.09%	-0.03%	-0.49%	1.65%	1.17%	0.87%	1.28%	15.81%
2020	0.15%	-3.68%	-7.15%	5.91%	0.71%	0.36%	2.01%	1.26%	-0.42%	-0.96%	3.42%	1.35%	2.39%
2021	-1.05%	-0.17%	1.59%	1.86%	0.97%	0.71%	0.78%	0.62%	-2.07%	1.65%	-1.17%	1.58%	5.33%
2022	-2.88%	-1.21%	-0.51%	-3.08%	-0.49%	-3.77%	3.28%	-1.18%	-5.52%				-14.58%

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

### ETFBM 30%ACWI 70%AGG Returns

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2012	2.15%	1.47%	-0.07%	0.29%	-2.03%	1.52%	1.20%	0.83%	1.00%	-0.19%	0.67%	0.70%	7.75%
2013	0.69%	0.38%	0.62%	1.53%	-1.52%	-1.88%	1.56%	-1.27%	2.45%	1.77%	0.29%	0.23%	4.86%
2014	-0.31%	1.82%	0.07%	0.93%	1.43%	0.50%	-0.61%	1.58%	-1.42%	1.11%	0.87%	-0.61%	5.43%
2015	1.04%	1.03%	-0.18%	0.63%	-0.31%	-1.53%	0.85%	-2.28%	-0.46%	2.34%	-0.43%	-0.77%	-0.14%
2016	-0.72%	0.25%	2.83%	0.58%	0.11%	1.34%	1.51%	-0.05%	0.32%	-1.15%	-1.49%	0.77%	4.31%
2017	1.02%	1.21%	0.37%	1.12%	1.14%	0.23%	1.05%	0.78%	0.16%	0.71%	0.50%	0.74%	9.41%
2018	0.92%	-2.05%	0.02%	-0.54%	0.61%	-0.10%	0.90%	0.61%	-0.25%	-2.68%	0.84%	-0.61%	-2.38%
2019	3.05%	0.66%	1.96%	0.89%	-0.48%	2.72%	0.15%	1.28%	0.25%	0.97%	0.68%	1.00%	13.86%
2020	0.99%	-1.14%	-4.39%	4.15%	2.00%	1.34%	2.54%	1.23%	-0.95%	-1.06%	4.37%	1.47%	10.71%
2021	-0.61%	-0.38%	0.05%	1.79%	0.58%	0.96%	1.05%	0.51%	-1.91%	1.61%	-0.50%	0.92%	4.09%
2022	-2.76%	-1.72%	-1.39%	-5.08%	0.67%	-3.51%	3.90%	-3.44%	-5.72%				-17.82%

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

Source: Portfolio Visualizer (Model Returns)

Palladium strategy (net 0.55% fee). Benchmarks: 30% iShares MSCI All Country World Index ETF (ACWI net 0.32% fee), and 70% 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 (net of); AGG (ETF) represents the Bloomberg Barclays Capital US Aggregate Bond index. You cannot invest directly in an index.

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