

October 31, 2015

GGE | ANNUAL REPORT

Guggenheim Enhanced Equity Strategy Fund

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EQUITY STRATEGY FUND

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We are constantly updating and expanding shareholder information services on the Fund's website in an ongoing effort to provide you with the most current information about how your Fund's assets are managed and the results of our efforts. It is just one more small way we are working to keep you better informed about your investment in the Fund.

DEAR SHAREHOLDER

We thank you for your investment in the Guggenheim Enhanced Equity Strategy Fund (the “Fund”). This report covers the Fund’s performance for the 12 months ended October 31, 2015.

The Fund’s primary investment objective is to provide a high level of current income, with a secondary objective of capital appreciation.

All Fund returns cited—whether based on net asset value (“NAV”) or market price—assume the reinvestment of all distributions. For the 12-month period ended October 31, 2015, the Fund generated a total return of -2.87% based on market price and a return of 3.94% based on NAV. As of October 31, 2015, the Fund’s market price of \$16.25 represented a discount of 11.59% to NAV of \$18.38.

Past performance is not a guarantee of future results. All NAV returns include the deduction of management fees, operating expenses, and all other Fund expenses. The market price of the Fund’s shares fluctuates from time to time, and it may be higher or lower than the Fund’s NAV.

The Fund paid a distribution of \$0.485 in each quarter of the period. The most recent distribution represents an annualized distribution rate of 10.55% based on the Fund’s closing market price of \$18.38 as of October 31, 2015. There is no guarantee of any future distributions or that the current returns and distribution rate will be maintained. A portion of the Fund’s distributions for the 12 months ended October 31, 2015 consisted of a return of capital. Please see the Questions & Answers Section and Note 2(d) on page 22 for more information on distributions for the period.

Guggenheim Funds Investment Advisors, LLC (“GFIA” or the “Advisor”) serves as the investment advisor to the Fund. Guggenheim Partners Investment Management, LLC (“GPIM” or the “Sub-Advisor”) serves as the Fund’s investment sub-advisor and is responsible for the management of the Fund’s portfolio of investments. Both the Advisor and the Sub-Advisor are affiliates of Guggenheim Partners, LLC (“Guggenheim”), a global diversified financial services firm.

GPIM seeks to achieve the Fund’s investment objectives by obtaining broadly diversified exposure to the equity markets utilizing an enhanced equity option strategy developed by GPIM. In connection with the implementation of GPIM’s strategy, the Fund utilizes financial leverage. The goal of the use of financial leverage is to enhance shareholder value, which is consistent with the Fund’s investment objective. The Fund’s use of financial leverage is intended to be flexible in nature and is monitored and adjusted, as appropriate, on an ongoing basis by the Advisor and GPIM. Leverage is generally maintained at approximately 30% of the Fund’s total assets. The Fund currently employs financial leverage through the use of a bank line of credit.

We encourage shareholders to consider the opportunity to reinvest their distributions from the Fund through the Dividend Reinvestment Plan (“DRIP”), which is described in detail on page 37 of this report. When shares trade at a discount to NAV, the DRIP takes advantage of the discount by reinvesting the quarterly dividend distribution in common shares of the Fund purchased in the market at a price less than NAV. Conversely, when the market price of the Fund’s common shares is at a premium above NAV,

the DRIP reinvests participants' dividends in newly issued common shares at the greater of NAV per share or 95% of the market price per share. The DRIP provides a cost-effective means to accumulate additional shares and enjoy the potential benefits of compounding returns over time.

To learn more about the Fund's performance and investment strategy for the 12 months ended October 31, 2015, we encourage you to read the Questions & Answers section of this report, which begins on page 5.

We appreciate your investment and look forward to serving your investment needs in the future. For the most up-to-date information on your investment, please visit the Fund's website at guggenheiminvestments.com/gge.

Sincerely,

A handwritten signature in black ink, appearing to read 'Donald C. Cacciapaglia', with a long horizontal flourish extending to the right.

Donald C. Cacciapaglia
President & Chief Executive Officer
Guggenheim Enhanced Equity Strategy Fund
November 30, 2015

The Guggenheim Enhanced Equity Strategy Fund (the “Fund”) is managed by a team of seasoned professionals at Guggenheim Partners Investment Management, LLC (“GPIM” or the “Sub-Advisor”). This team includes B. Scott Miner, Chairman of Investments and Global Chief Investment Officer; Anne Bookwalter Walsh, CFA, JD, Assistant Chief Investment Officer; Farhan Sharaff, Assistant Chief Investment Officer, Equities; Jayson Flowers, Senior Managing Director and Head of Equity and Derivative Strategies; and Daniel Cheeseman, Portfolio Manager. In the following paragraphs, the investment team discusses positioning of the Fund and performance for the 12-month period ended October 31, 2015.

Please describe the Fund's objective and management strategies.

The Fund's primary investment objective is to provide a high level of current income, with a secondary objective of capital appreciation. The Fund invests at least 80% of its net assets, plus the amount of any borrowings for investment purposes, in equity securities. GPIM seeks to achieve the Fund's investment objectives by obtaining broadly diversified exposure to the equity markets and utilizing a covered call strategy developed by GPIM. The Fund may seek to obtain exposure to equity markets through investments in exchange traded funds (“ETFs”) or other investment funds that track equity market indices, through investments in individual equity securities, and/or through derivative instruments that replicate the economic characteristics of exposure to equity securities or markets.

The Fund utilizes leverage to seek to deliver a portfolio targeting similar risk exposure as the Standard & Poor's 500® Index (the “S&P 500”) while presenting the potential benefit of greater income and a focus on capital appreciation.

Currently GPIM seeks to obtain exposure to equity markets by investing primarily in ETFs. ETFs are selected for broadly based market exposure and broad sector exposures. Only highly liquid securities are held, since liquidity is essential for a strategy that seeks to benefit from market volatility.

The Fund has the ability to write call options on the ETFs or on indices that the ETFs may track, which will typically be at- or out-of-the money. GPIM's strategy typically targets one-month options, although options of any strike price or maturity may be used. The Fund may, but does not have to, cover 100% of the equity holdings in its portfolio. The typical hedge ratio for the fund is 67%, which is designed to produce a portfolio that, inclusive of leverage, has a beta of one to broad market indices. The hedge ratio, however, may be adjusted depending on the investment team's view of the market and Guggenheim's macroeconomic views. Changing the hedge ratio will impact the beta of the portfolio resulting in a portfolio that is either over- or underexposed to broad market equities.

An option on an index is considered covered if the Fund also holds shares of a passively managed ETF that fully replicates the respective index and has a value at least equal to the notional value of the option written. Any call options sold without an equivalent ETF underlying are collateralized with segregated assets.

GPIM may engage in selling call options on indices, which could include securities that are not specifically held by the Fund. In connection with the Fund's ability to write call options, the Fund earmarks or segregates cash or liquid securities or otherwise covers such transactions.

The Fund seeks to achieve its primary investment objective of seeking a high level of current income through premiums received from selling options and dividends paid on securities owned by the Fund.

Although the Fund will receive premiums from the options written, by writing a covered call option, the Fund forgoes any potential increase in value of the underlying securities above the strike price specified in an option contract through the expiration date of the option.

To the extent GPIM's strategy seeks to achieve broad equity exposure through a portfolio of common stocks, the Fund would expect to hold a diversified portfolio of stocks. To the extent GPIM's equity exposure strategy is implemented through investment in broad-based equity ETFs or other investment funds or derivative instruments that replicate the economic characteristics of exposure to equity securities markets, the Fund's portfolio is expected to comprise fewer holdings.

The Fund ordinarily focuses its investments on securities of U.S. issuers, but may invest up to 15% of its total assets in U.S. dollar-denominated securities of foreign issuers. The Fund may invest in or seek exposure to equity securities of issuers of any market capitalization.

What was the economic and market environment over the last 12 months?

At the end of the period, the U.S. economic expansion was continuing to mature, but remained strong. Central banks' aversion to any downturn should support the rebound in risk assets that began after the market correction in the third quarter.

The U.S. Federal Open Market Committee's resolution to remain on hold at its September meeting, due to volatility emanating from China, confirmed that global macroeconomic issues and market volatility can play a significant role in determining when policy tightening finally commences. Any bad news or setback in the global economy is likely to be met with a policy decision that will be supportive for credit and equity markets.

In Europe, European Central Bank (ECB) President Mario Draghi hinted strongly that additional monetary policy easing is on the way, as inflation remains well below the ECB's 2% target and the growth outlook remains uncertain. In Japan, the central bank revised down inflation and growth forecasts, and signaled a willingness to expand its quantitative easing program further.

In the U.S., a decision to raise rates will be data dependent. Given the October employment report, December liftoff appears likely, unless there is some catastrophic event before then. A December hike should be taken as a sign that the U.S. Federal Reserve is sufficiently comfortable with the strength of the economy and the near-term outlook, which should be good news for investors.

As for the fundamentals of the U.S. economy, the data looks encouraging. Underlying real GDP growth was actually stronger than the 1.5% preliminary estimate for the third quarter would suggest. This is because the U.S. was due for an inventory correction, and declining inventory investment shaved 1.4 percentage points off the headline growth figure. Consumer spending, which accounts for about two-thirds of U.S. demand, rose by 3.2%, indicating that consumer spending is strong heading into the holiday shopping season. Robust equity returns in October—the largest monthly gains in four years—also bode well for Christmas sales.

It would be premature to pop the champagne just yet. Slowing emerging market growth continues to weigh upon economic growth around the world, particularly in Europe. Meanwhile, the measure of New York Stock Exchange market breadth has failed to make new highs, or at least return to old highs, which would confirm sustainability of the equity market rally occurring at period end. This is okay for the moment, because equities have yet to quite reach their old highs either—at period end, the market remained a stone’s throw away from its peak in May—but breadth often leads the market, and over the coming months investors should keep a close eye on it.

How did the Fund perform in this environment?

All Fund returns cited—whether based on net asset value (“NAV”) or market price—assume the reinvestment of all distributions. For the 12-month period ended October 31, 2015, the Fund generated a total return of -2.87% based on market price and a return of 3.94% based on NAV. As of October 31, 2015, the Fund’s market price of \$16.25 represented a discount of 11.59% to NAV of \$18.38. As of October 31, 2014, the Fund’s market price of \$18.70 represented a discount of 8.20% to NAV of \$19.58.

Past performance is not a guarantee of future results. All NAV returns include the deduction of management fees, operating expenses, and all other Fund expenses. The market price of the Fund’s shares fluctuates from time to time, and it may be higher or lower than the Fund’s NAV.

The Fund’s market price performance reflects an increase in its discount to NAV, widening from -4.49% six months ago to -11.59% as of October 31, 2015. The 5.20% return of the S&P 500, which notched an all-time high in the period, exceeded both the market-price and NAV return of the Fund. The Fund aims to have volatility similar to the S&P 500 Index. Over the period, the Fund’s standard deviation was 17.4%, compared with 14.9% for the S&P 500 Index.

What were the Fund’s distributions?

The Fund paid a distribution of \$0.485 in each quarter of the period. The most recent distribution represents an annualized distribution rate of 10.55% based on the Fund’s closing market price of \$18.38 as of October 31, 2015. The Fund’s distribution rate is not constant, and the amount of the distributions, when declared by the Fund’s Board of Trustees, is subject to change based on the performance of the Fund. For the 12 months ended October 31, 2015, 34% of the Fund’s distributions consisted of investment company taxable income or net capital gain and 66% consisted of return of capital. While the Fund generally seeks to pay dividends that will consist primarily of investment company taxable income and net capital gain, because of the nature of the Fund’s investments and changes in market conditions from time to time, or in order to maintain a more stable distribution level over time, the distributions paid by the Fund for any particular period may be more or less than the amount of net investment income from that period. If the Fund’s total distributions in any year exceed the amount of its investment company taxable income and net capital gain for the year, any such excess would generally be characterized as a return of capital for U.S. federal income tax purposes. A return of capital distribution is in effect a partial return of the amount a shareholder invested in the Fund. A return of capital does not necessarily reflect the Fund’s investment performance and should not be confused with “yield” or “income.” A return of capital distribution decreases the Fund’s total assets and, therefore, could have the effect of increasing the Fund’s expense ratio. Please see Note 2(d) on page 22 for more information on distributions for the period.

The Fund's distribution rate for the period outpaced the approximately 2% yield of the S&P 500 over the same period.

What drove the Fund's performance?

Equity prices climbed through the period, with major indices continuing to register new highs. Among the factors influencing Fund performance, returns on underlying portfolio holdings was a major contributor, with the Fund's largest allocation being to one of the better-performing indices for the period, the S&P 500. The Fund tends to be composed of a wide set of equity index exposures, so performance is a weighted average blend of underlying holdings and the options sold against them.

The S&P 500 Index returned 5.20% for the period, with the balance of the Fund allocated to other broad domestic market equity indices, such as the NASDAQ 100, a broad tech measure that was one of the strongest performers, returning 13.14% for the 12-month period, and the small-cap Russell 2000 Index, which returned 0.34%.

The Fund's derivative use also contributed slightly to the Fund's return. The strategy on average sold at-the-money calls to deliver higher premium intake and manage the fund's overall risk profile. A strategy selling out-of-the-money calls, by comparison, would have performed worse in a period like that over much of the past 12 months, with range-bound performance for broad equity market indices.

In addition, during the year ended October 31, 2015 the Fund received approximately \$908,000 related to class action settlements from securities that the Fund purchased dating back to the inception of the Fund in 2004. The net impact of these payments to the Fund's NAV return was approximately 0.93%. The timing and amount of any additional future class action payments is unknown.

In addition to a flat market, the Fund had to contend with low realized volatility and correspondingly low implied volatility over the period. Implied volatility, as measured by the Chicago Board Options Exchange Volatility Index ("VIX"), typically trades approximately four points higher than realized volatility. Through the end of October 2015, this spread was 1.4 points. The low implied volatility for much of the period reduced the premiums the Fund gained through the sale of call options, limiting a source of potential alpha for the Fund. There were exceptions, such as at the end of the period, when concerns about economic growth globally penetrated U.S. markets and caused the VIX to briefly spike above 50, its highest point for the past several years.

The low-volatility environment was in spite of the lack of U.S. central bank quantitative easing, which had served as a major support for asset markets for the last few years. The U.S. Government 10-year rate was flat over the year, with interest rate volatility held down by the attractiveness of U.S. yields relative to those in Europe and Asia. The low rate volatility caused by excess liquidity appeared to hold down equity volatility as well.

Any comment on the use of leverage?

The use of leverage positively contributed to Fund performance, which is typically the case when the market moves higher over a specific period. The use of leverage within the strategy is part of the rule set, with the amount of leverage typically maintained at 30% of the Fund's total assets. Leverage may, however, be changed up or down depending on variability in economic conditions and/or the firm's

macro view. Leverage at the end of the period was about 32%. There is no guarantee that the Fund's leverage strategy will be successful, and the Fund's use of leverage may cause the Fund's NAV and market price of common shares to be more volatile than if no leverage was employed by the Fund.

Do you have any other comments about the Fund?

The Fund's NAV return and market return lagged the broad market. The 12-month period ending October 31, 2015, was characterized by above-average equity returns coupled with relatively low levels of implied volatility. In such an atypical environment, the Fund may underperform; however, over time, the Fund seeks to outperform its benchmark with similar risk and greater income.

Index Definitions:

Indices are unmanaged and it is not possible to invest directly in an index.

The Chicago Board Options Exchange Volatility Index, often referred to as the VIX (its ticker symbol), the fear index or the fear gauge, is a measure of the implied volatility of S&P 500 options. It represents a measure of the market's expectation of stock market volatility over the next 30-day period. Quoted in percentage points, the VIX represents the expected daily movement in the S&P 500 over the next 30-day period, which is then annualized.

The S&P 500 is a capitalization-weighted index of 500 stocks. The index is designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.

The NASDAQ-100 Index includes 100 of the largest domestic and international non-financial securities listed on The NASDAQ Stock Market based on market capitalization. The Index reflects companies across major industry groups including computer hardware and software, telecommunications, retail/wholesale trade, and biotechnology. It does not contain securities of financial companies including investment companies.

The Dow Jones Industrial Average is a price-weighted average of 30 significant stocks traded on the New York Stock Exchange and the NASDAQ.

GGE Risks and Other Considerations

The views expressed in this report reflect those of the portfolio managers only through the report period as stated on the cover. These views are subject to change at any time, based on market and other conditions, and should not be construed as a recommendation of any kind. The material may also contain forward-looking statements that involve risk and uncertainty, and there is no guarantee they will come to pass. There can be no assurance that the Fund will achieve its investment objectives. The value of the Fund will fluctuate with the value of the underlying securities. Historically, closed-end funds often trade at a discount to their net asset value. Past performance does not guarantee future results.

Please see guggenheiminvestments.com/gge for a detailed discussion of the Fund's risks and other considerations.

Fund Statistics

Share Price	\$16.25
Net Asset Value	\$18.38
Discount to NAV	-11.59%
Net Assets (\$000)	\$91,796

**AVERAGE ANNUAL TOTAL RETURNS
FOR THE PERIOD ENDED OCTOBER 31, 2015**

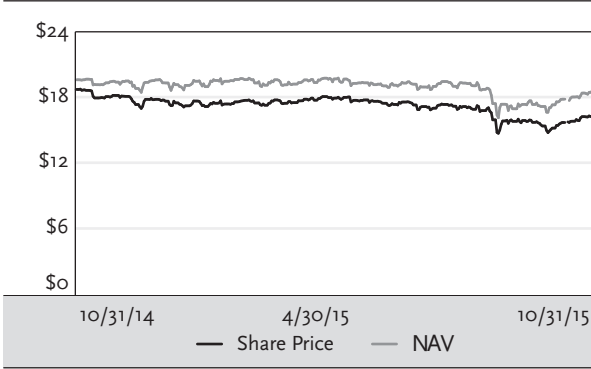
	One Year	Three Year	Five Year	10 Year	Since Inception (01/27/04)
Guggenheim Enhanced Equity Strategy Fund					
NAV	3.94%	8.38%	10.07%	-9.88%	-7.09%
Market	-2.87%	7.25%	10.94%	-9.09%	-7.70%

Holdings Diversification**(Market Exposure as % of Net Assets)****% of Net Assets**

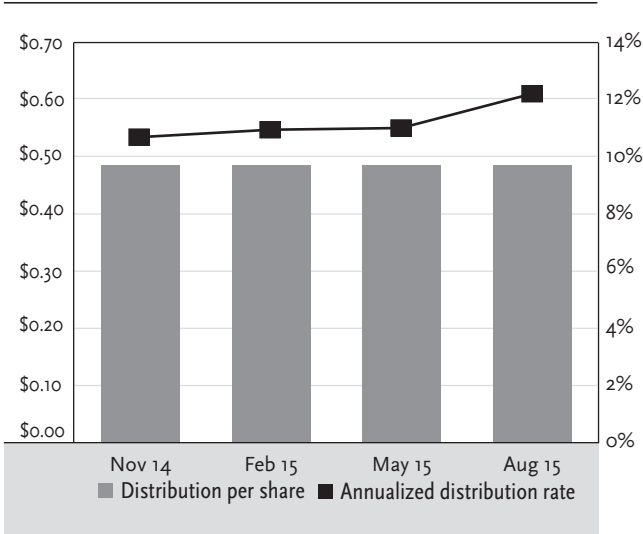
Exchange-Traded Funds	149.1%
Short Term Investments	1.3%
Options Written	-1.5%
Total Investments	148.9%
Other Assets & Liabilities, net	-48.9%
Net Assets	100.0%

Past performance does not guarantee future results and does not reflect the deduction of taxes that a shareholder would pay on fund distributions. All NAV returns include the deduction of management fees, operating expenses, and all other Fund expenses. All portfolio data is subject to change daily. For more current information, please visit guggenheiminvestments.com/gge. The above summaries are provided for information purposes only and should not be viewed as recommendations.

Share Price & NAV History



Distributions to Shareholders & Annualized Distribution Rate



All or a portion of the above distributions may be characterized as a return of capital. For the year ended October 31, 2015, 66% of the distributions were characterized as Return of Capital.

PORTFOLIO OF INVESTMENTS

October 31, 2015

	Shares	Value
EXCHANGE-TRADED FUNDS[†] - 149.1%		
SPDR S&P 500 ETF Trust ¹	293,622	\$ 61,052,823
iShares S&P 500 Growth ETF ¹	206,666	24,384,521
iShares S&P 500 Value ETF ¹	240,904	21,736,768
PowerShares QQQ Trust Series 1 ¹	131,743	14,930,434
iShares Russell 2000 Index ETF ¹	128,444	14,814,731
Total Exchange-Traded Funds (Cost \$139,589,640)		136,919,277
SHORT TERM INVESTMENTS[†] - 1.3%		
Dreyfus Treasury Prime Cash Management Institutional Shares, 0.00% ²	1,157,437	1,157,437
Total Short Term Investments (Cost \$1,157,437)		1,157,437
Total Investments - 150.4% (Cost \$140,747,077)		\$ 138,076,714

	Contracts (100 shares per contract)	Value
OPTIONS WRITTEN[†] - (1.5)%		
Call options on:		
S&P 500 Index Expiring November 2015 with strike price of \$2,075.00*	143	\$ (380,380)
Russell 2000 Index Expiring November 2015 with strike price of \$1,160.00*	256	(477,440)
NASDAQ 100 Index Expiring November 2015 with strike price of \$4,625.00*	64	(505,280)
Total Call options		(1,363,100)
Total Options Written (Premiums received \$1,550,895)		(1,363,100)
Other Assets & Liabilities, net - (48.9)%		(44,917,139)
Total Net Assets - 100.0%		\$ 91,796,475

* Non-income producing security.

[†] Value determined based on Level 1 inputs — See Note 4.

¹ Security is segregated as collateral for open written option contracts and borrowings outstanding.

² Rate indicated is the 7-day yield as of October 31, 2015.

S&P Standard & Poor's.

See notes to financial statements.

The following table represents the Fund's investments carried on the Statement of Assets and Liabilities by caption and by level within the fair value hierarchy as of October 31, 2015 (See Note 4):

Description	Level 1 Quoted Prices	Level 2 Significant Observable Inputs	Level 3 Significant Unobservable Inputs	Total
Assets				
Exchange-Traded Funds	\$ 136,919,277	\$ —	\$ —	\$ 136,919,277
Short Term Investments	1,157,437	—	—	1,157,437
Total Assets	\$ 138,076,714	\$ —	\$ —	\$ 138,076,714
Liabilities				
Options Written	\$ 1,363,100	\$ —	\$ —	\$ 1,363,100
Total Liabilities	\$ 1,363,100	\$ —	\$ —	\$ 1,363,100

There were no transfers between levels during the year ended October 31, 2015.

STATEMENTS OF ASSETS AND LIABILITIES

October 31, 2015

ASSETS:

Investments, at value (Cost \$140,747,077)	\$ 138,076,714
Cash	338,992
Receivables:	
Investments sold	305,994
Other assets	6,870
Total assets	138,728,570

LIABILITIES:

Borrowings	45,000,000
Options written, at value (Premiums received of \$1,550,895)	1,363,100
Interest due on borrowings	48,602
Payable for:	
Investments purchased	290,043
Investment advisory fees	90,104
Fund accounting fees	6,711
Trustees' fees and expenses*	6,093
Administration fees	2,599
Other fees	124,843
Total liabilities	46,932,095

NET ASSETS	\$ 91,796,475
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NET ASSETS CONSIST OF:

Common shares, \$0.01 par value per share; unlimited number of shares authorized, 4,993,991 shares issued and outstanding	\$ 49,940
Additional paid-in capital	733,748,913
Accumulated net realized loss on investments and options	(639,519,810)
Net unrealized depreciation on investments and options	(2,482,568)
NET ASSETS	\$ 91,796,475
Shares outstanding (\$0.01 par value with unlimited amount authorized)	4,993,991
Net asset value	\$ 18.38

* *Relates to Trustees not deemed "interested persons" within the meaning of Section 2(a) (19) of the 1940 Act.*

See notes to financial statements.

STATEMENTS OF OPERATIONS

October 31, 2015

For the Year Ended October 31, 2015

INVESTMENT INCOME:

Dividends	\$	2,483,265
Interest		3
Total investment income		2,483,268

EXPENSES:

Investment advisory fees		1,190,984
Interest expense		409,453
Professional fees		87,601
Trustees' fees and expenses*		72,710
Fund accounting fees		51,432
Printing fees		40,388
Administration fees		38,532
Registration and filings		22,589
Transfer agent fees		19,556
Insurance		19,098
Custodian fees		12,319
Other fees		118
Total expenses		1,964,780

Less:		
Expenses waived by advisor		(70,058)
Net expenses		1,894,722
Net investment income		588,546

NET REALIZED AND UNREALIZED GAIN (LOSS):

Net realized gain (loss) on:		
Investments		12,574,813
Options written		(9,074,155)
Net realized gain		3,500,658
Net change in unrealized appreciation (depreciation) on:		
Investments		(5,784,370)
Options written		5,397,008
Net change in unrealized appreciation (depreciation)		(387,362)
Net realized and unrealized gain		3,113,296
Net increase in net assets resulting from operations	\$	3,701,842

* Relates to Trustees not deemed "interested persons" within the meaning of Section 2(a)(19) of the 1940 Act.

See notes to financial statements.

STATEMENTS OF CHANGES IN NET ASSETS

October 31, 2015

	Year Ended October 31, 2015	Year Ended October 31, 2014
INCREASE (DECREASE) IN NET ASSETS FROM OPERATIONS:		
Net investment income (loss)	\$ 588,546	\$ (1,282,186)
Net realized gain on investments and options	3,500,658	14,173,313
Net change in unrealized appreciation (depreciation) on investments and options	(387,362)	(3,191,999)
Net increase in net assets resulting from operations	3,701,842	9,699,128
DISTRIBUTIONS TO SHAREHOLDERS FROM:		
Net investment income	(3,263,544)	(9,688,344)
Return of capital	(6,424,799)	-
Total distributions	(9,688,343)	(9,688,344)
Net increase (decrease) in net assets	(5,986,501)	10,784
NET ASSETS:		
Beginning of year	97,782,976	97,772,192
End of year	\$ 91,796,475	\$ 97,782,976
Undistributed (distributions in excess of) net investment income at end of year	\$ -	\$ (1,149,516)

See notes to financial statements.

STATEMENT OF CASH FLOWS

October 31, 2015

For the Year Ended October 31, 2015

Cash Flows from Operating Activities:

Net Increase in net assets resulting from operations \$ 3,701,842

Adjustments to Reconcile Net Increase in Net Assets Resulting from Operations to Net Cash Provided by Operating and Investing Activities:

Net change in unrealized appreciation (depreciation) on investments	5,784,370
Net change in unrealized appreciation (depreciation) on options	(5,397,008)
Net realized gain on investments	(12,574,813)
Net realized loss on written options	9,074,155
Purchase of long-term investments	(534,768,070)
Proceeds from sale of long-term investments	548,384,401
Premiums received on written options	66,373,097
Cost of written options closed	(75,270,390)
Corporate actions and other payments	907,613
Net proceeds from sale of short-term investments	2,219,470
Increase in investments sold receivable	(305,994)
Decrease in other assets	30,231
Increase in investments purchased payable	290,043
Increase in interest due on borrowings	35,125
Increase in investment advisory fees payable	164
Increase in fund accounting fees payable	1,926
Increase in trustees' fees and expenses payable	6,093
Increase in administration fees payable	6
Increase in other fees	27,909
Net Cash Provided by Operating and Investing Activities	\$ 8,520,170

Cash Flows From Financing Activities:

Distributions paid	(9,688,343)
Proceeds from borrowings	20,000,000
Payments made on borrowings	(18,500,000)
Net Cash Used in Financing Activities	(8,188,343)
Net increase in cash	331,827
Cash at Beginning of Year	7,165
Cash at End of Year	\$ 338,992

Supplemental Disclosure of Cash Flow Information: Cash paid during the period for interest

\$ 374,328

See notes to financial statements.

	Year Ended October 31, 2015	Year Ended October 31, 2014	Year Ended October 31, 2013	Year Ended October 31, 2012	Year Ended October 31, 2011
Per Share Data:					
Net asset value, beginning of period	\$ 19.58	\$ 19.58	\$ 19.31	\$ 18.09	\$ 16.92
Income from investment operations:					
Net investment income (loss) ^(a)	0.12	(0.26)	(0.15)	(0.15)	0.23
Net gain on investments (realized and unrealized)	0.62	2.20	2.19	2.62	1.65
Total from investment operations	0.74	1.94	2.04	2.47	1.88
Less distributions from:					
Net investment income	(0.65)	(1.94)	(0.87)	(1.25)	(0.27)
Return of capital	(1.29)	—	(0.90)	—	(0.44)
Total distributions to shareholders	(1.94)	(1.94)	(1.77)	(1.25)	(0.71)
Net asset value, end of period	\$ 18.38	\$ 19.58	\$ 19.58	\$ 19.31	\$ 18.09
Market Value, end of period	\$ 16.25	\$ 18.70	\$ 19.13	\$ 17.96	\$ 15.45
Total Return^(b)					
Net asset value	3.94%	10.10%	11.26%	13.99%	11.34%
Market value	(2.87)%	8.17%	17.47%	25.22%	8.79%
Ratios/Supplemental Data:					
Net assets, end of period (in thousands)	\$ 91,796	\$ 97,783	\$ 97,772	\$ 96,454	\$ 90,330
Ratio to average net assets of:					
Net investment income	0.62%	(1.29)%	(0.79)%	(0.77)%	1.30%
Total expenses	2.08%	1.88%	1.85%	1.96%	2.32%
Net expenses ^{(c)(d)}	2.01%	1.81%	1.78%	1.89%	2.23%
Portfolio turnover rate	381%	566%	651%	645%	267%

See notes to financial statements.

	Year Ended October 31, 2015	Year Ended October 31, 2014	Year Ended October 31, 2013	Year Ended October 31, 2012	Year Ended October 31, 2011
Senior Indebtedness					
Total Borrowings outstanding (in thousands)	\$ 45,000	\$ 43,500	\$ 32,000	\$ 40,000	\$ 26,000
Asset Coverage per \$1,000 of indebtedness ^(e)	\$ 3,040	\$ 3,248	\$ 4,055	\$ 3,411	\$ 4,474

(a) Based on average shares outstanding.

(b) Total investment return is calculated assuming a purchase of a common share at the beginning of the period and a sale on the last day of the period reported at net asset value ("NAV") or market price per share. Dividends and distributions are assumed to be reinvested at NAV for NAV returns or the prices obtained under the Fund's Dividend Reinvestment Plan for market value returns. Total investment return does not reflect brokerage commissions.

(c) Net expense information reflects the expense ratios after expense waivers.

(d) Excluding interest expense, the net operating expense ratios would be:

	October 31, 2015	October 31, 2014	October 31, 2013	October 31, 2012	October 31, 2011
	1.58%	1.49%	1.46%	1.55%	1.90%

(e) Calculated by subtracting the Fund's total liabilities (not including borrowings) from the Fund's total assets and dividing by the total borrowings.

See notes to financial statements.

Note 1 – Organization:

Guggenheim Enhanced Equity Strategy Fund (the “Fund”) was organized as a Delaware statutory trust on October 20, 2003. The Fund is registered as a non-diversified, closed-end management investment company under the Investment Company Act of 1940, as amended (the “1940 Act”). The Fund’s primary investment objective is to provide a high level of current income, with a secondary objective of capital appreciation. Effective May 16, 2011, the Fund seeks to achieve its investment objectives by obtaining broadly diversified exposure to the equity markets and utilizing a covered call option strategy which follows a proprietary dynamic rules-based methodology developed by Guggenheim Partners Investment Management, LLC (“GPIM” or the “Sub-Adviser”), an indirect subsidiary of Guggenheim Partners, LLC, a global diversified financial services firm (“Guggenheim”). Prior to May 16, 2011, the Fund pursued its investment objectives by investing its assets primarily in dividend-paying common and preferred stocks. There can be no assurance that the Fund will achieve its investment objectives. The Fund’s investment objectives are considered fundamental and may not be changed without shareholder approval.

Note 2 – Accounting Policies:

The Fund operates as an investment company and accordingly follows the investment company accounting and reporting guidance of the Financial Accounting Standards Board (“FASB”) Accounting Standards Codification Topic 946 Financial Services – Investment Companies.

The following significant accounting policies are in conformity with U.S. generally accepted accounting principles (“GAAP”) and are consistently followed by the Fund. This requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates. All time references are based on Eastern Time.

(a) Valuation of Investments

The Board of Trustees of the Fund (the “Board”) has adopted policies and procedures for the valuation of the Fund’s investments (the “Valuation Procedures”). Pursuant to the Valuation Procedures, the Board has delegated to a valuation committee, consisting of representatives from Guggenheim’s investment management, fund administration, legal and compliance departments (the “Valuation Committee”), the day-to-day responsibility for implementing the Valuation Procedures, including, under most circumstances, the responsibility for determining the fair value of the Fund’s securities or other assets.

Valuations of the Fund’s securities are supplied primarily by pricing services appointed pursuant to the processes set forth in the Valuation Procedures. The Valuation Committee convenes monthly, or more frequently as needed and will review the valuation of all assets which have been fair valued for reasonableness. The Fund’s officers, through the Valuation Committee and consistent with the monitoring and review responsibilities set forth in the Valuation Procedures, regularly review procedures used by, and valuations provided by, the pricing services.

Equity securities listed on an exchange (New York Stock Exchange (“NYSE”) or American Stock Exchange) are valued at the last quoted sales price as of the close of business on the NYSE, usually 4:00 p.m. Eastern time on the valuation date. Equity securities listed on the NASDAQ market system

are valued at the NASDAQ Official Closing Price on the valuation date, which may not necessarily represent the last sale price. If there has been no sale on such exchange or NASDAQ on such day, the security is valued at the mean between the last available bid and ask prices on such day.

Open-end investment companies ("Mutual Funds") are valued at their NAV as of the close of business on the valuation date. Exchange Traded Funds ("ETFs") and closed-end investment companies are valued at the last quoted sales price.

Exchange-traded options are valued at the mean between the bid and ask prices on the principal exchange on which they are traded.

Debt securities with a maturity of greater than 60 days at acquisition are valued at prices that reflect broker/dealer supplied valuations or are obtained from independent pricing services, which may consider the trade activity, treasury spreads, yields or price of bonds of comparable quality, coupon, maturity, and type, as well as prices quoted by dealers who make markets in such securities. Short-term debt securities with a maturity of 60 days or less at acquisition and repurchase agreements are valued at amortized cost, provided such amount approximates market value.

Investments for which market quotations are not readily available (including restricted securities) are fair valued as determined in good faith by the Adviser, subject to review by the Valuation Committee, pursuant to methods established or ratified by the Board. Valuations in accordance with these methods are intended to reflect each security's (or asset's) "fair value." Each such determination is based on a consideration of all relevant factors, which are likely to vary from one pricing context to another. Examples of such factors may include, but are not limited to: (i) the type of security, (ii) the initial cost of the security, (iii) the existence of any contractual restrictions on the security's disposition, (iv) the price and extent of public trading in similar securities of the issuer or of comparable companies, (v) quotations or evaluated prices from broker-dealers and/or pricing services, (vi) information obtained from the issuer, analysts, and/or the appropriate stock exchange (for exchange traded securities), (vii) an analysis of the company's financial statements, and (viii) an evaluation of the forces that influence the issuer and the market(s) in which the security is purchased and sold (e.g. the existence of pending merger activity, public offerings or tender offers that might affect the value of the security).

(b) Investment Transactions and Investment Income

Investment transactions are accounted for on the trade date. Realized gains and losses on investments are determined on the identified cost basis. Dividend income is recorded net of applicable withholding taxes on the ex-dividend date. Interest income, including the amortization of premiums and accretion of discount is accrued daily. Proceeds from lawsuits related to investment holdings are recorded as realized gains.

(c) Options

When an option is written, the premium received is recorded as an asset with an equal liability and is subsequently marked to market to reflect the current market value of the option written. These liabilities are reflected as options written in the Statement of Assets and Liabilities. Premiums received from writing options which expire unexercised are recorded on the expiration date as a realized gain. The difference between the premium received and the amount paid on effecting a closing purchase transaction, including brokerage commissions, is also treated as a realized gain, or

if the premium is less than the amount paid for the closing purchase transactions, as a realized loss. If an option is exercised, the premium is added to the cost of the underlying security purchase or proceeds from the sale of the underlying security in determining whether there has been a realized gain or loss.

(d) Distributions

The Fund declares and pays quarterly distributions. Any net realized long-term gains are distributed annually. Distributions to shareholders are recorded on the ex-dividend date. The amount and timing of distributions are determined in accordance with federal income tax regulations, which may differ from GAAP.

The Fund pays a quarterly distribution in a fixed amount and will continue to do so until such amount is modified by the Board. If sufficient net investment income is not available, the distribution will be supplemented by short/long-term capital gains and, to the extent necessary, return of capital.

Note 3 – Investment Advisory Agreement, Sub-Advisory Agreement and Other Agreements:

Pursuant to an Investment Advisory Agreement (the “Agreement”) between the Fund and Guggenheim Funds Investment Advisors (“GFIA” or the “Adviser”), GFIA acts as the investment adviser for and supervises the investment and reinvestment of the Fund’s assets, supervises the investment program of the Fund, furnishes offices, necessary facilities and equipment, oversees the activities of the Sub- Adviser, provides personnel including certain officers required for the Fund’s administrative management and compensates the officers and trustees, if any, of the Fund who are its affiliates.

Pursuant to a Sub-Advisory Agreement (the “Sub-Advisory Agreement”) among the Fund, the Adviser and the Sub-Adviser, GPIM provides a continuous investment program for the Fund’s portfolio; provides investment research, makes and executes recommendations for the purchase and sale of securities; and provides certain facilities and personnel.

Under the Advisory Agreement, GFIA is entitled to receive an investment advisory fee at an annual rate equal to 0.85% of the average daily value of the Fund’s total managed assets. Under the terms of a fee waiver agreement, and for so long as the investment sub-adviser of the Fund is an affiliate of GFIA, GFIA has agreed to waive 0.05% of its advisory fee such that the Fund pays to GFIA an investment advisory fee at an annual rate equal to 0.80% of the average daily value of the Fund’s total managed assets. Pursuant to the Sub-Advisory Agreement, the Adviser pays to GPIM a sub-advisory fee equal to 0.40% of the average daily value of the Fund’s total managed assets.

Rydex Fund Services, LLC (“RFS”), an affiliate of the Adviser and the Sub- Adviser, provides fund administration services to the Fund. As compensation for these services RFS receives a fund administration fee payable monthly at the annual rate set forth below as a percentage of the average daily managed assets of the Fund:

Managed Assets	Rate
First \$200,000,000	0.0275%
Next \$300,000,000	0.0200%
Next \$500,000,000	0.0150%
Over \$1,000,000,000	0.0100%

RFS serves as the accounting agent of the Fund. As accounting agent, RFS is responsible for maintaining the books and records of the Fund's securities and cash. RFS receives an accounting fee payable monthly at the annual rate set forth below as a percentage of the average daily managed assets of the Fund.

Managed Assets	Rate
First \$200,000,000	0.0300%
Next \$300,000,000	0.0150%
Next \$500,000,000	0.0100%
Over \$1,000,000,000	0.0075%
Minimum annual charge	\$50,000
Certain out-of-pocket charges	Varies

For the purposes of calculating the fees payable under the foregoing agreements, average daily managed assets means the average daily value of the Fund's total assets minus the sum of its accrued liabilities. Total assets means all of the Fund's assets and is not limited to its investment securities. Accrued liabilities means all of the Fund's liabilities other than borrowings for investment purposes.

The Bank of New York Mellon ("BNY") acts as the Fund's custodian. As custodian, BNY is responsible for the custody of the Fund's assets.

Certain officers of the Fund may also be officers, directors and/or employees of the Adviser. The Fund does not compensate its officers who are officers, directors and /or employees of the Adviser.

Note 4 – Fair Value Measurement:

In accordance with GAAP, fair value is defined as the price that the Fund would receive to sell an investment or pay to transfer a liability in an orderly transaction with an independent buyer in the principal market, or in the absence of a principal market, the most advantageous market for the investment or liability. GAAP establishes a three-tier fair value hierarchy based on the types of inputs used to value assets and liabilities and requires corresponding disclosure. The hierarchy and the corresponding inputs are summarized below:

Level 1 — quoted prices in active markets for identical assets or liabilities.

Level 2 — significant other observable inputs (for example quoted prices for securities that are similar based on characteristics such as interest rates, prepayment speeds, credit risk, etc.).

Level 3 — significant unobservable inputs based on the best information available under the circumstances, to the extent observable inputs are not available, which may include assumptions.

The types of inputs available depend on a variety of factors, such as the type of security and the characteristics of the markets in which it trades, if any. Fair valuation determinations that rely on fewer or no observable inputs require greater judgment. Accordingly, fair value determinations for Level 3 securities require the greatest amount of judgment. There are no fair valued securities as of October 31, 2015.

Independent pricing services are used to value a majority of the Fund's investments. When values are not available from a pricing service, they will be determined under the valuation policies that

have been reviewed and approved by the Board. In any event, values are determined using a variety of sources and techniques, including: market prices; broker quotes; and models which derive prices based on inputs such as prices of securities with comparable maturities and characteristics or based on inputs such as anticipated cash flows or collateral, spread over Treasuries, and other information and analysis.

The inputs or methodologies used for valuing securities are not necessarily an indication of the risk associated with investing in those securities. The suitability of the techniques and sources employed to determine fair valuation are regularly monitored and subject to change.

Transfers between investment levels may occur as the markets fluctuate and/or the availability of data used in an investment's valuation changes. Transfers between valuation levels, if any, are in comparison to the valuation levels at the end of the previous fiscal year, and are effective using the fair value as of the beginning of the current fiscal period.

Note 5 – Federal Income Taxes:

The Fund intends to comply with the requirements of Subchapter M of the Internal Revenue Code of 1986, as amended, applicable to regulated investment companies. Accordingly, no provision for U.S. federal income taxes is required. In addition, by distributing substantially all of its ordinary income and long-term capital gains, if any, during each calendar year, the Fund intends not to be subject to U.S. federal excise tax.

Due to inherent differences in the recognition of income, expenses and realized gains/losses under GAAP and federal income tax purposes, permanent differences between book and tax basis reporting have been identified and appropriately reclassified on the Statement of Assets and Liabilities. As of October 31, 2015, the following reclassification was made to the capital accounts of the Fund to reflect permanent book and tax differences relating to the reclassification of distributions from capital gains to ordinary income. Net investment income, net realized gains and net assets were not affected by these reclassifications.

	Additional Paid-in Capital	Undistributed (Distributions in Excess of) Net Investment Income	Accumulated Net Realized Loss
	\$ (3,824,514)	\$ 3,824,514	\$ –

As of October 31, 2015, the cost of investments and accumulated unrealized appreciation/depreciation on investments for federal income tax purposes were as follows:

Cost of Investments for Tax Purposes	Gross Tax Unrealized Appreciation	Gross Tax Unrealized Depreciation	Net Tax Unrealized Depreciation on Investments
\$ 140,967,696	\$ 720,164	\$ (3,611,146)	\$ (2,890,982)

As of October 31, 2015, tax components of accumulated earnings (excluding paid-in capital) were as follows:

	Accumulated Capital and Other Losses	Net Unrealized Depreciation
	\$ (639,111,396)	\$ (2,890,982)

The differences between book and tax basis unrealized appreciation (depreciation) is attributable to the tax deferral of losses on wash sales and the marking-to-market on certain open options held at year-end for tax purposes.

For the years ended October 31, 2015 and 2014, the tax character of distributions paid to shareholders as reflected in the Statement of Changes in Net Assets was as follows:

Distributions paid from:	2015	2014
Ordinary income*	\$ 3,263,544	\$ 9,688,343
Return of capital	6,424,799	-
	\$ 9,688,343	\$ 9,688,343

*Ordinary income distributions for federal income tax purposes includes distributions from realized gains.

As of October 31, 2015, the Fund had a capital loss carryforward ("CLCF") of \$638,854,478 available to offset possible future capital gains.

As of October 31, 2015, the Fund anticipates utilizing \$3,824,514 of CLCF. Of the CLCF, \$190,012,028 is set to expire on October 31, 2016, \$443,299,661 is set to expire on October 31, 2017, and \$5,542,789 is set to expire on October 31, 2019. In order for the Fund's CLCF to be beneficially utilized in a given tax year, the Fund's net investment income plus net realized capital gains must exceed the total Fund distributions for that year. Given the current size of the Fund, it is highly unlikely that the Fund will be able to fully utilize the CLCF prior to its expiration. Such CLCF cannot be utilized prior to the utilization of new capital loss carryovers, if any, created after December 31, 2010. When the Fund utilizes CLCFs to offset its realized gains, distributions to shareholders derived from those realized gains are treated as ordinary income for tax purposes under the Internal Revenue Code and are shown as such on IRS Form 1099 DIV.

For all open tax years and all major jurisdictions, management of the Fund has concluded that there are no significant uncertain tax positions that would require recognition in the financial statements. Uncertain tax positions are tax positions taken or expected to be taken in the course of preparing the Fund's tax returns that would not meet a more-likely-than not threshold of being sustained by the applicable tax authority and would be recorded as a tax expense in the current year. Open tax years are those that are open for examination by taxing authorities (i.e. generally the last four tax year ends and the interim tax period since then).

Note 6 – Investments in Securities:

During the year ended October 31, 2015, the cost of purchases and proceeds from sales of investments, excluding written options and short-term securities, were \$534,768,070 and \$548,384,401, respectively.

Note 7 – Derivatives:

The Fund is required by GAAP to disclose: a) how and why a fund uses derivative instruments, b) how derivative instruments and related hedge fund items are accounted for, and c) how derivative instruments and related hedge items affect a fund's financial position, results of operations and cash flows.

(a) Options Written

The Fund employs an options strategy in an attempt to generate income and gains from option premiums received from selling options. The Fund's options strategy follows a proprietary dynamic rules-based methodology.

An option on a security is a contract that gives the holder of the option, in return for a premium, the right to buy from (in the case of a call) or sell to (in the case of a put) the writer of the option the security underlying the option at a specified exercise or "strike" price. The writer of an option on a security has the obligation upon exercise of the option to deliver the underlying security upon payment of the exercise price (in the case of a call) or to pay the exercise price upon delivery of the underlying security (in the case of a put).

There are several risks associated with transactions in options on securities. As the writer of a covered call option, the Fund forgoes, during the option's life, the opportunity to profit from increases in the market value of the security covering the call option above the sum of the premium and the strike price of the call, but has retained the risk of loss should the price of the underlying security decline. A writer of a put option is exposed to the risk of loss if the fair value of the underlying security declines, but profits only to the extent of the premium received if the underlying security increases in value. The writer of an option has no control over the time when it may be required to fulfill its obligation as writer of the option. Once an option writer has received an exercise notice, it cannot effect a closing purchase transaction in order to terminate its obligation under the option and must deliver the underlying security at the exercise price.

The Fund entered into written option contracts during the year ended October 31, 2015.

Details of the transaction were as follows:

	Number of Contracts	Premiums Received
Options outstanding, beginning of period	10,650	\$ 1,374,033
Options written during the period	62,851	66,373,097
Options closed during the period	(73,038)	(66,196,235)
Options outstanding, end of period	463	\$ 1,550,895

(b) Summary of Derivatives Information

The following table presents the types of derivatives in the Fund by location as presented on the Statement of Assets Liabilities as of October 31, 2015.

**Statement of Assets and Liabilities
Presentation of Fair Values of Derivative Instruments:**

Primary Risk Exposure	Asset Derivatives		Liability Derivatives	
	Statement of Assets and Liabilities Location	Fair Value	Statement of Assets and Liabilities Location	Fair Value
Equity risk	N/A	\$-	Options written, at value	\$1,363,100
Total		\$-		\$1,363,100

The following table presents the effect of derivatives instruments on the Statement of Operations for the year ended October 31, 2015.

Effect of Derivative Instruments on the Statement of Operations:

Primary Risk Exposure	Amount of Net Realized Loss on Derivatives	Net Change in Unrealized Appreciation (Depreciation) on Derivatives		Total
		Options written	Options written	
Equity risk	\$ (9,074,155)	\$ 5,397,008	\$ (3,677,147)	
Total	\$ (9,074,155)	\$ 5,397,008	\$ (3,677,147)	

Note 8 – Capital:**Common Shares**

The Fund has an unlimited amount of common shares, \$0.01 par value, authorized and 4,993,991 (reflecting the 1 for 5 reverse stock split that occurred prior to the opening of trading on the NYSE on June 5, 2009) issued and outstanding. In connection with the Fund's dividend reinvestment plan, the Fund did not issue any shares during the year ended October 31, 2015 or the year ended October 31, 2014.

Note 9 – Borrowings:

The Fund entered into a \$50,000,000 committed credit facility agreement whereby the counterparty has agreed to provide secured financing to the Fund and the Fund will provide pledged collateral to the counterparty. The interest on the amount borrowed is based on the 1-month LIBOR plus 0.75%. As of October 31, 2015, there was \$45,000,000 outstanding in connection with the Fund's credit facility.

The average daily amount of the borrowings on the credit facility during the year ended October 31, 2015 was \$45,593,151 with a related average interest rate of 0.93%. The maximum amount outstanding during the period was \$48,000,000. As of October 31, 2015, the total value of securities segregated and pledged as collateral in connection with written options contracts and borrowings was \$136,919,277.

There is no guarantee that the Fund's leverage strategy will be successful. The Fund's use of leverage may cause the Fund's NAV and market price of common shares to be more volatile and can magnify the effect of any losses.

Note 10 – Indemnifications:

In the normal course of business, the Fund enters into contracts that contain a variety of representations, which provide general indemnifications. The Fund's maximum exposure under these arrangements is unknown, as this would require future claims that may be made against the Fund that have not yet occurred. However, the Fund expects the risk of loss to be remote.

Note 11 – Subsequent Event:

The Fund evaluated subsequent events through the date the financial statements were available for issue and determined there were no additional material events that would require disclosure in the Fund's financial statements.

**The Board of Trustees and Shareholders of
Guggenheim Enhanced Equity Strategy Fund**

We have audited the accompanying statement of assets and liabilities of the Guggenheim Enhanced Equity Strategy Fund (the Fund), including the portfolio of investments, as of October 31, 2015, and the related statements of operations and cash flows for the year then ended, the statements of changes in net assets for each of the two years in the period then ended, and the financial highlights for each of the five years in the period then ended. These financial statements and financial highlights are the responsibility of the Fund's management. Our responsibility is to express an opinion on these financial statements and financial highlights based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements and financial highlights are free of material misstatement. We were not engaged to perform an audit of the Fund's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Fund's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements and financial highlights, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our procedures included confirmation of securities owned as of October 31, 2015, by correspondence with the custodian and brokers. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements and financial highlights referred to above present fairly, in all material respects, the financial position of the Guggenheim Enhanced Equity Strategy Fund at October 31, 2015, and the results of its operations and its cash flows for the year then ended, the changes in its net assets for each of the two years in the period then ended, and its financial highlights for each of the five years in the period then ended, in conformity with U.S. generally accepted accounting principles.

Ernst + Young LLP

McLean, Virginia
December 22, 2015

Expense Ratio Information

The expense ratios shown on the Financial Highlights page of this report do not reflect fees and expenses incurred indirectly by the Fund as a result of its investments in shares of other investment companies. If these fees were included in the expense ratio, the expense ratio would increase by 0.22% for the year ended October 31, 2015.

Federal Income Tax Information

This information is being provided as required by the Internal Revenue Code. Amounts shown may differ from those elsewhere in the report because of differences in tax and financial reporting practice.

The Fund recognized qualified dividend income of \$1,916,886 during the fiscal year ended October 31, 2015. The Fund intends to designate the maximum amount of dividends that qualify for the reduced tax rate pursuant to the Jobs and Growth Tax Relief Reconciliation Act of 2003.

For corporate shareholders, \$1,977,676 of the investment income qualifies for the dividends-received deduction.

In January 2016, you will be advised on IRS Form 1099 DIV or substitute 1099 DIV as to the federal tax status of the distributions received by you in the calendar year 2015.

Results of Shareholder Votes

The Annual Meeting of Shareholders of the Fund was held on April 29, 2015. Shareholders voted on the election of Trustees.

With regards to the election of the following Trustees by shareholders of the Fund:

	# of Shares in Favor	# of Shares Against	# of Shares Abstain
Jerry B. Farley	4,095,848	29,105	50,895
Roman Friedrich III	4,083,004	40,715	52,129
Ronald A. Nyberg	4,078,018	36,088	61,742

The other Trustees of the Fund not up for election in 2015 were Randall C. Barnes, Donald C. Cacciapaglia, Donald A. Chubb, Robert B. Karn III, Maynard F. Olverius, and Ronald E. Toupin, Jr.

Trustees

The Trustees of the Guggenheim Enhanced Equity Strategy Fund and their principal business occupations during the past five years:

Name, Address* and Year of Birth	Position(s) Held with Trust	Term of Office and Length of Time Served**	Principal Occupation(s) During Past Five Years	Number of Portfolios in Fund Complex Overseen	Other Directorships Held by Trustees
Independent Trustees:					
Randall C. Barnes (1951)	Trustee	Since 2010	Current: Private Investor (2001-present). Former: Senior Vice President and Treasurer, PepsiCo, Inc. (1993-1997); President, Pizza Hut International (1991-1993); Senior Vice President, Strategic Planning and New Business Development, PepsiCo, Inc. (1987-1990).	106	Current: Trustee, Purpose Investments Funds (2014-present).
Donald A. Chubb, Jr. (1946)	Trustee	Since 2014	Current: Business broker and manager of commercial real estate, Griffith & Blair, Inc. (1997-present).	102	Current: Midland Care, Inc. (2011-present).
Jerry B. Farley (1946)	Trustee	Since 2014	Current: President, Washburn University (1997-present).	102	Current: Westar Energy, Inc. (2004-present); CoreFirst Bank & Trust (2000-present).
Roman Friedrich III (1946)	Trustee and Chairman of the Contracts Review Committee	Since 2004	Current: Founder and Managing Partner, Roman Friedrich & Company (1998-present). Former: Senior Managing Director, MLV & Co. LLC (2010-2011).	102	Current: Zincore Metals, Inc. (2009-present). Former: Axiom Gold and Silver Corp. (2011-2012).
Robert B. Karr III (1942)	Trustee and Chairman of the Audit Committee	Since 2010	Current: Consultant (1998-present). Former: Arthur Andersen (1965-1997) and Managing Partner, Financial and Economic Consulting, St. Louis office (1987-1997).	102	Current: Peabody Energy Company (2003-present); GP Natural Resource Partners, LLC (2002-present).

Name, Address* and Year of Birth	Position(s) Held with Trust	Term of Office and Length of Time Served**	Principal Occupation(s) During Past Five Years	Number of Portfolios in Fund Complex Overseen	Other Directorships Held by Trustees
Independent Trustees continued:					
Ronald A. Nyberg (1953)	Trustee and Chairman of the Nominating and Governance Committee	Since 2004	Current: Partner, Nyberg & Cassioppi, LLC (2000-present). Former: Executive Vice President, General Counsel and Corporate Secretary, Van Kampen Investments (1982-1999).	108	Current: Edward-Elmhurst Healthcare System (2012-present).
Maynard F. Oliverius (1943)	Trustee	Since 2014	Current: Retired. Former: President and CEO, Stormont-Vail HealthCare (1996-2012).	102	Current: Fort Hays State University Foundation (1999-present); Stormont-Vail Foundation (2013-present); University of Minnesota HealthCare Alumni Association Foundation (2009-present).
Ronald E. Toupin, Jr. (1958)	Trustee and Chairman of the Board	Since 2004	Current: Portfolio Consultant (2010-present). Former: Vice President, Manager and Portfolio Manager, Nuveen Asset Management (1998-1999); Vice President, Nuveen Investment Advisory Corp. (1992-1999); Vice President and Manager, Nuveen Unit Investment Trusts (1991-1999); and Assistant Vice President and Portfolio Manager, Nuveen Unit Investment Trusts (1988-1999), each of John Nuveen & Co., Inc. (1982-1999).	105	Former: Bennett Group of Funds (2011-2013).

Name, Address* and Year of Birth	Position(s) Held with Trust	Term of Office and Length of Time Served***	Principal Occupation(s) During Past Five Years	Number of Portfolios in Fund Complex Overseen	Other Directorships Held by Trustees
Interested Trustee:					
Donald C. Cacciapaglia*** (1951)	President, Chief Executive Officer and Trustee	Since 2012	Current: President and CEO, certain other funds in the Fund Complex (2012-present); Vice Chairman, Guggenheim Investments (2010-present). Former: Chairman and CEO, Channel Capital Group, Inc. (2002-2010).	237	Current: Clear Spring Life Insurance Company (2015-present); Guggenheim Partners Japan, Ltd. (2014-present); Delaware Life (2013-present); Guggenheim Life and Annuity Company (2011-present); Paragon Life Insurance Company of Indiana (2011-present).

* The business address of each Trustee is c/o Guggenheim Investments, 227 West Monroe Street, Chicago, IL 60606.

** After a Trustee's initial term, each Trustee is expected to serve a three-year term concurrent with the class of Trustees for which he serves:

- Messrs. Bames, Chubb and Kam are Class III Trustees. The Class III Trustees are expected to stand for re-election at the Fund's annual meeting of shareholders for fiscal year ending October 31, 2016.
- Messrs. Cacciapaglia, Oliverius and Toupin are Class I Trustees. The Class I Trustees are expected to stand for re-election at the Fund's annual meeting of shareholders for fiscal year ending October 31, 2017.
- Messrs. Farley, Friedrich and Nyberg, are Class II Trustees. The Class II Trustees are expected to stand for re-election at the Fund's annual meeting of shareholders for fiscal year ending October 31, 2018.

*** This Trustee is deemed to be an "interested person" of the Fund under the 1940 Act by reason of his position with the Adviser and/or the parent of the Adviser.

Officers

The Officers of the Guggenheim Enhanced Equity Strategy Fund, who are not Trustees, and their principal occupations during the past five years:

Name, Address* and Year of Birth	Position(s) held with the Trust	Term of Office and Length of Time Served**	Principal Occupations During Past Five Years
Joseph M. Arruda (1966)	Assistant Treasurer	Since 2014	Current: Assistant Treasurer, certain other funds in the Fund Complex (2006-present); Vice President, Security Investors, LLC (2010-present); CFO and Manager, Guggenheim Specialized Products, LLC (2009-present).
William H. Belden, III (1965)	Vice President	Since 2014	Former: Vice President, Security Global Investors, LLC (2010-2011); Vice President, Rydex Advisors, LLC (2010); Vice President, Rydex Advisors II, LLC (2010).
Joanna M. Catalucci (1966)	Chief Compliance Officer	Since 2012	Current: Vice President, certain other funds in the Fund Complex (2006-present); Managing Director, Guggenheim Funds Investment Advisors, LLC (2005-present).
			Former: Vice President of Management, Northern Trust Global Investments (1999-2005).
Mark J. Furjanic (1959)	Assistant Treasurer	Since 2008	Current: Chief Compliance Officer, certain funds in the Fund Complex (2012-present); Senior Managing Director, Guggenheim Investments (2012-present).
			Former: Chief Compliance Officer and Secretary, certain other funds in the Fund Complex (2008-2012); Senior Vice President & Chief Compliance Officer, Security Investors, LLC and certain affiliates (2010-2012); Chief Compliance Officer and Senior Vice President, Rydex Advisors, LLC and certain affiliates (2010-2011).
James M. Howley (1972)	Assistant Treasurer	Since 2007	Current: Vice President, Guggenheim Investments (2005-present); Assistant Treasurer, certain other funds in the Fund Complex (2008-present).
			Former: Senior Manager, Ernst & Young LLP (1999-2005).
			Current: Director, Guggenheim Investments (2004-present); Assistant Treasurer, certain other funds in the Fund Complex (2006-present).
			Former: Manager of Mutual Fund Administration, Van Kampen Investments, Inc. (1996-2004).

Name, Address* and Year of Birth	Position(s) held with the Trust	Term of Office and Length of Time Served**	Principal Occupations During Past Five Years
Officers continued:			
Amy J. Lee (1961)	Chief Legal Officer	Since 2013	Current: Chief Legal Officer; certain other funds in the Fund Complex (2013-present); Senior Managing Director, Guggenheim Investments (2012-present). Former: Vice President, Associate General Counsel and Assistant Secretary, Security Benefit Life Insurance Company and Security Benefit Corporation (2004-2012).
Mark E. Mathiasen (1978)	Secretary	Since 2008	Current: Secretary, certain other funds in the Fund Complex (2007-present); Managing Director, Guggenheim Investments (2007-present).
Michael P. Megaris (1984)	Assistant Secretary	Since 2014	Current: Assistant Secretary, certain other funds in the Fund Complex (2014-present); Senior Associate, Guggenheim Investments (2012-present).
Adam Nelson (1979)	Assistant Treasurer	Since 2015	Former: J.D., University of Kansas School of Law (2009-2012). Current: Vice President, Guggenheim Investments (2015-present); Assistant Treasurer, certain other funds in the Fund Complex (2015-present).
Kimberly J. Scott (1974)	Assistant Treasurer	Since 2012	Former: Assistant Vice President and Fund Administration Director, State Street Corporation (2013-2015); Fund Administration Assistant Director, State Street (2011-2013); Fund Administration Manager, State Street (2009-2011). Current: Vice President, Guggenheim Investments (2012-present); Assistant Treasurer, certain other funds in the Fund Complex (2012-present).
Bryan Stone (1979)	Vice President	Since 2014	Former: Financial Reporting Manager, Invesco, Ltd. (2010-2011); Vice President/Assistant Treasurer of Mutual Fund Administration, Van Kampen Investments, Inc./Morgan Stanley Investment Management (2009-2010); Manager of Mutual Fund Administration, Van Kampen Investments, Inc./Morgan Stanley Investment Management (2005-2009). Current: Vice President, certain other funds in the Fund Complex (2014-present); Director, Guggenheim Investments (2013-present).
Former: Senior Vice President, Neuberger Berrman Group LLC (2009-2013); Vice President, Morgan Stanley (2002-2009).			

Name, Address* and Year of Birth	Position(s) held with the Trust	Term of Office and Length of Time Served**	Principal Occupations During Past Five Years
John L. Sullivan (1955)	Chief Financial Officer, Chief Accounting Officer and Treasurer	Since 2010	<p>Current: CFO, Chief Accounting Officer and Treasurer, certain other funds in the Fund Complex (2010-present); Senior Managing Director, Guggenheim Investments (2010-present).</p> <p>Former: Managing Director and CCO, each of the funds in the Van Kampen Investments fund complex (2004-2010); Managing Director and Head of Fund Accounting and Administration, Morgan Stanley Investment Management (2002-2004); CFO and Treasurer, Van Kampen Funds (1996-2004).</p>

* The business address of each officer is c/o Guggenheim Investments, 227 West Monroe Street, Chicago, IL 60606.

** Each officer serves an indefinite term, until his or her successor is duly elected and qualified. The date reflects the commencement date upon which the officer held any officer position with the Trust.

Unless the registered owner of common shares elects to receive cash by contacting Computershare Trust Company, N.A. (the “Plan Administrator”), all dividends declared on common shares of the Fund will be automatically reinvested by the Plan Administrator, Administrator for shareholders in the Fund’s Dividend Reinvestment Plan (the “Plan”), in additional common shares of the Fund. Participation in the Plan is completely voluntary and may be terminated or resumed at any time without penalty by notice if received and processed by the Plan Administrator prior to the dividend record date; otherwise such termination or resumption will be effective with respect to any subsequently declared dividend or other distribution. Some brokers may automatically elect to receive cash on your behalf and may re-invest that cash in additional common shares of the Fund for you. If you wish for all dividends declared on your common shares of the Fund to be automatically reinvested pursuant to the Plan, please contact your broker.

The Plan Administrator will open an account for each common shareholder under the Plan in the same name in which such common shareholder’s common shares are registered. Whenever the Fund declares a dividend or other distribution (together, a “Dividend”) payable in cash, non-participants in the Plan will receive cash and participants in the Plan will receive the equivalent in common shares. The common shares will be acquired by the Plan Administrator for the participants’ accounts, depending upon the circumstances described below, either (i) through receipt of additional unissued but authorized common shares from the Fund (“Newly Issued Common Shares”) or (ii) by purchase of outstanding common shares on the open market (“Open-Market Purchases”) on the New York Stock Exchange or elsewhere. If, on the payment date for any Dividend, the closing market price plus estimated brokerage commission per common share is equal to or greater than the net asset value per common share, the Plan Administrator will invest the Dividend amount in Newly Issued Common Shares on behalf of the participants. The number of Newly Issued Common Shares to be credited to each participant’s account will be determined by dividing the dollar amount of the Dividend by the net asset value per common share on the payment date; provided that, if the net asset value is less than or equal to 95% of the closing market value on the payment date, the dollar amount of the Dividend will be divided by 95% of the closing market price per common share on the payment date. If, on the payment date for any Dividend, the net asset value per common share is greater than the closing market value plus estimated brokerage commission, the Plan Administrator will invest the Dividend amount in common shares acquired on behalf of the participants in Open-Market Purchases.

If, before the Plan Administrator has completed its Open-Market Purchases, the market price per common share exceeds the net asset value per common share, the average per common share purchase price paid by the Plan Administrator may exceed the net asset value of the common shares, resulting in the acquisition of fewer common shares than if the Dividend had been paid in Newly Issued Common Shares on the Dividend payment date. Because of the foregoing difficulty with respect to Open-Market Purchases, the Plan provides that if the Plan Administrator is unable to invest the full Dividend amount in Open-Market Purchases during the purchase period or if the market discount shifts to a market premium during the purchase period, the Plan Administrator may cease making Open-Market Purchases and may invest the uninvested portion of the Dividend amount in Newly Issued Common Shares at net asset value per common share at the close of business on the Last Purchase Date provided that, if the net asset value is less than or equal to 95% of the then current market price per common share; the dollar amount of the Dividend will be divided by 95% of the market price on the payment date.

The Plan Administrator maintains all shareholders' accounts in the Plan and furnishes written confirmation of all transactions in the accounts, including information needed by shareholders for tax records. Common shares in the account of each Plan participant will be held by the Plan Administrator on behalf of the Plan participant, and each shareholder proxy will include those shares purchased or received pursuant to the Plan. The Plan Administrator will forward all proxy solicitation materials to participants and vote proxies for shares held under the Plan in accordance with the instruction of the participants.

There will be no brokerage charges with respect to common shares issued directly by the Fund. However, each participant will pay a pro rata share of brokerage commission incurred in connection with Open-Market Purchases. The automatic reinvestment of Dividends will not relieve participants of any Federal, state or local income tax that may be payable (or required to be withheld) on such Dividends.

The Fund reserves the right to amend or terminate the Plan. There is no direct service charge to participants with regard to purchases in the Plan; however, the Fund reserves the right to amend the Plan to include a service charge payable by the participants.

All correspondence or questions concerning the Plan should be directed to the Plan Administrator, Computershare Trust Company, N.A., P.O. Box 30170 College Station, TX 77842-3170; Attention: Shareholder Services Department, Phone Number: (866) 488-3559 or online at www.computershare.com/investor.

Guggenheim Enhanced Equity Strategy Fund (the “Fund”) was organized as a Delaware statutory trust on October 20, 2003, and is registered as a non-diversified, closed-end management investment company under the Investment Company Act of 1940, as amended (the “1940 Act”). Guggenheim Funds Investment Advisors, LLC (“GFIA” or the “Adviser”), a subsidiary of Guggenheim Funds Services, LLC (“GFS”), an indirect subsidiary of Guggenheim Partners, LLC, a global, diversified financial services firm (“Guggenheim Partners”), serves as the Fund’s investment adviser and provides certain administrative and other services pursuant to an investment advisory agreement between the Fund and GFIA (the “Investment Advisory Agreement”). (Guggenheim Partners, GFIA, GFS, Guggenheim Partners Investment Management, LLC (“GPIM” or the “Sub-Adviser”) and their affiliates may be referred to herein collectively as “Guggenheim.”) Under the terms of the Investment Advisory Agreement, GFIA also is responsible for overseeing the activities of GPIM, an indirect subsidiary of Guggenheim Partners, which performs portfolio management and related services for the Fund pursuant to an investment sub-advisory agreement by and among the Fund, the Adviser and GPIM (the “Sub Advisory Agreement” and together with the Investment Advisory Agreement, the “Advisory Agreements”). Under the supervision and oversight of GFIA and the Fund’s Board of Trustees (the “Board,” with the members of the Board referred to individually as the “Trustees”), GPIM provides a continuous investment program for the Fund’s portfolio, provides investment research, makes and executes recommendations for the purchase and sale of securities and provides certain facilities and personnel for the Fund.

Following an initial two-year term, the Advisory Agreements continue in effect from year to year provided that such continuance is specifically approved at least annually by (i) the Board or a majority of the outstanding voting securities (as defined in the 1940 Act) of the Fund, and, in either event, (ii) the vote of a majority of the Trustees who are not “interested persons,” as defined by the 1940 Act, of the Trust (the “Independent Trustees”) casting votes in person at a meeting called for such purpose. At meetings held in person on April 29, 2015 (the “April Meeting”) and on May 19, 2015 (the “May Meeting”), the Contracts Review Committee of the Board (the “Committee”), consisting solely of the Independent Trustees, met separately from Guggenheim to consider the proposed renewal of the Advisory Agreements. As part of its review process, the Committee was represented by independent legal counsel to the Independent Trustees (“Independent Legal Counsel”). Independent Legal Counsel reviewed and discussed with the Committee various key aspects of the Trustees’ legal responsibilities relating to the proposed renewal of the Advisory Agreements and other principal contracts. In this connection, Independent Legal Counsel advised the Committee of: (i) the responsibilities of board members under applicable law; (ii) the standards for determining what constitutes an excessive fee as delineated by the courts and the factors the Trustees should consider in determining whether to approve the fee arrangements; and (iii) the disclosure requirements pertaining to these approvals, as required by the Securities and Exchange Commission. The Committee took into account various materials received from Guggenheim and Independent Legal Counsel. Recognizing that the evaluation process with respect to the services provided by each of GFIA and GPIM is an ongoing one, the Committee also considered the variety of written materials, reports and oral presentations it received (and also received by the full Board) throughout the year regarding performance and operating results of the Fund.

In connection with the contract review process, FUSE Research Network LLC (“FUSE”), an independent, third-party research provider, was engaged to prepare advisory contract renewal reports designed specifically to help boards of directors/trustees fulfill their advisory contract

renewal responsibilities. The objective of the reports is to present the subject funds' relative position regarding fees, expenses and total return performance, with comparisons to a peer group of funds identified by Guggenheim. Guggenheim prepared a presentation in response to a formal request for information sent by Independent Legal Counsel on behalf of the Independent Trustees. In addition, Guggenheim made a presentation at the April Meeting, which addressed areas identified for discussion by the Committee Chair and Independent Legal Counsel. Throughout the process, the Committee asked questions of management and requested certain additional information, which Guggenheim provided following the April Meeting (collectively with the foregoing reports and materials, the "Contract Materials").

Among other things, Guggenheim provided: (i) staffing reports and biographies of those key personnel of GFIA and GPIM providing services to the Fund; (ii) descriptions of various services performed by Guggenheim for the Fund, including the provision of a continuous investment program for the Fund, monitoring compliance with Fund investment strategies and statutory requirements, reviewing trading processes and conducting investment performance analyses; (iii) information regarding each firm's compliance and regulatory history, including its Form ADV; and (iv) information concerning the parent company and overall Guggenheim organization and strategic plans and goals, all to assist the Committee in assessing the nature, extent and quality of services provided by each of GFIA and GPIM, respectively. In addition, Guggenheim's response included information comparing the investment performance, advisory fees and total expenses of the Fund to other funds (including such information presented in the FUSE reports as well as supplemental information prepared by Guggenheim), charts showing gross revenues, expenses and earnings for Guggenheim by product line and with respect to the Fund, including a breakout of various expenses, a description of Guggenheim's expense allocation methodology and information about the profitability of the Fund to Guggenheim Investments (the investment management business of Guggenheim Partners), financial information for Guggenheim Investments, and certain information about Guggenheim's insurance policies, business continuity plan, proxy voting procedures, trade allocation, shareholder communications and compliance monitoring, among other things.

The Committee considered the foregoing Contract Materials in the context of its substantial accumulated experience in governing the Fund and weighed the factors and standards discussed with Independent Legal Counsel. Following an analysis and discussion of the factors identified below and in the exercise of its business judgment, the Committee concluded that it was in the best interests of the Fund to recommend that the Board approve the renewal of both of the Advisory Agreements for an additional 12-month term.

Investment Advisory Agreement

Nature, Extent and Quality of Services Provided by the Adviser: With respect to the nature, extent and quality of services currently provided by the Adviser, the Committee noted that the Adviser delegated responsibility for the investment and reinvestment of the Fund's assets to the Sub-Adviser. The Committee considered the Adviser's responsibility to oversee the Sub-Adviser and that the Adviser has similar oversight responsibilities for other registered investment companies for which GFIA serves as investment adviser. The Committee took into account information provided by Guggenheim describing and illustrating the Adviser's processes and activities for providing oversight of the Sub-Adviser's investment strategies and compliance with investment restrictions, including analyses and monitoring of returns versus peer funds and relevant indices on both a

market price and net asset value (“NAV”) basis, volatility, dividend yield, premium/discount and use of derivatives, as well as information regarding the Adviser’s Sub-Advisory Oversight Committee. The Committee also considered the secondary market support services provided by Guggenheim to the Fund and, in this regard, noted the materials describing the activities of Guggenheim’s dedicated Closed-End Fund Team, including with respect to communication with financial advisers, data dissemination and relationship management. In addition, the Committee considered the information provided by Guggenheim concerning the education, experience, professional affiliations, areas of responsibility and duties of key personnel performing services for the Fund, including those personnel providing compliance oversight. In this connection, the Committee considered Guggenheim’s resources and related efforts to retain, attract and motivate capable personnel to serve the Fund and noted Guggenheim’s report on recent additions and departures in personnel who work on matters relating to the Fund or are significant to the operations of the Adviser.

The Committee also considered the Adviser’s attention to relevant developments in the mutual fund industry and its observance of compliance and regulatory requirements and noted that on a regular basis the Board receives and reviews information from the Fund’s Chief Compliance Officer regarding compliance policies and procedures established pursuant to Rule 38a-1 under the 1940 Act. In addition, the Committee took into account the various compliance and risk management initiatives undertaken by Guggenheim, including, among other things, the hiring of additional staff to support the firm’s Chief Risk Officer, initiatives related to the risks associated with the investment process and risk at the enterprise level, the organization’s risk management infrastructure and critical activities. The Committee also considered Guggenheim’s other initiatives intended to achieve greater enhancements and efficiencies in Guggenheim’s ability to provide services to the Guggenheim Funds (including the Fund), such as efforts to consolidate compliance manuals and align processes of the Fund with those of other Guggenheim Funds managed by GFIA or an affiliate. In connection with the Committee’s evaluation of the overall package of services provided by the Adviser, the Committee considered the Adviser’s role in monitoring and coordinating compliance responsibilities with the administrator, custodian and other service providers to the Fund.

With respect to Guggenheim’s resources and the Adviser’s ability to carry out its responsibilities under the Investment Advisory Agreement, the Chief Financial Officer of Guggenheim Investments reviewed with the Committee certain unaudited financial information concerning Guggenheim Investments’ holding company, Guggenheim Partners Investment Management Holdings, LLC (“GPIMH”), including GFIA. (The Committee received the audited consolidated financial statements of GPIMH and audited financial statements of GFIA once available following the April Meeting.)

The Committee also considered the acceptability of the terms of the Investment Advisory Agreement (including the scope of services required to be performed by GFIA). Based on the foregoing, and based on other information received (both oral and written) at the April Meeting and at the May Meeting, as well as other considerations, including the Committee’s knowledge of the Adviser’s quality of performance of its duties through Board meetings, discussions and reports during the year, the Committee concluded that the Adviser and its personnel were qualified to serve the Fund in such capacity and may reasonably be expected to continue to provide a high quality of services under the Investment Advisory Agreement with respect to the Fund.

Investment Performance: The Fund commenced investment operations on January 27, 2004. The Committee considered the Fund's investment performance by reviewing the Fund's total return on an NAV and market price basis for the five-year, three-year and one-year periods ended December 31, 2014. The Committee compared the Fund's performance to a peer group of closed-end funds determined by the Adviser (the "peer group of funds") and the Fund's benchmark for the same time periods. The Committee noted that the Adviser's peer group selection methodology for the Fund starts with the entire U.S.-listed taxable closed-end fund universe, and excludes funds that, among other things, under normal market conditions, are less than 80% covered with options, are less than 80% domestic, primarily write options on individual equities or are sector-oriented. Consequently, the peer group of funds included other closed-end funds that generally invest a majority of their assets in equity securities with a similar covered call strategy. The Committee considered that the peer group of funds is consistent with the peer group used for purposes of the Fund's quarterly performance reporting. In assessing the peer group constituents and both the comparative performance and fee data presented (including in the FUSE reports), the Committee considered Guggenheim's statement that there are challenges associated with developing relevant peer groups for the Fund.

The Committee noted that the Fund's investment results were consistent with its investment objective to seek a high level of current income, with a secondary objective of long-term capital appreciation. The Committee also considered that the Adviser does not directly manage the investment portfolio but delegated such duties to the Sub-Adviser. In addition, the Committee considered the Fund's structure and form of leverage, and among other information related to leverage, the cost of the leverage and the aggregate leverage outstanding as of December 31, 2014, as well as the net yield on leverage assets and net impact on common assets due to leverage for the one-year period ended December 31, 2014. Based on the information provided, including with respect to the Adviser's sub-advisory oversight processes, the Committee concluded that the Adviser had appropriately reviewed and monitored the Sub-Adviser's investment performance.

Comparative Fees, Costs of Services Provided and the Profits Realized by the Adviser from its Relationship with the Fund: The Committee compared the Fund's advisory fee (which includes the sub-advisory fee paid to the Sub-Adviser) and total net expense ratio to the peer group of funds and noted the Fund's percentile rankings in this regard. The Committee also reviewed the average and median advisory fees and expense ratios, including expense ratio components (e.g., transfer agency fees, administration fees and other operating expenses) of the peer group of funds. The Committee noted that although the Fund's advisory fee and total net expense ratio were above the median of its peer group of funds (67th percentile and 83rd percentile, respectively), none of the unaffiliated funds within the peer group of funds employ leverage. The Committee noted Guggenheim's statement that leverage has the potential to enhance returns, but also increase advisory fees when calculated as a percentage of common assets. In addition, the Committee noted the Fund was the smallest fund in its peer group and the impact of the size differential on the expense ratio related to fixed expenses. The Committee also took into account Guggenheim's view that because the Fund's unaffiliated peer funds are managed by two asset management firms, with sizable closed-end fund assets under management, these asset management firms have been able to implement a unique fee pricing structure. In addition, the Committee noted the fee waiver provided by the Adviser for as long as the Sub-Adviser and Adviser are affiliated.

With respect to the costs of services provided and profits realized by Guggenheim Investments from its relationship with the Fund, the Committee reviewed a profitability analysis and data from management setting forth the average assets under management for the twelve months ended December 31, 2014, ending assets under management as of December 31, 2014, gross revenues received by Guggenheim Investments, expenses incurred in providing services to the Fund, earnings and the operating margin/profitability rate, including variance information relative to the foregoing amounts as of December 31, 2013. In addition, the Chief Financial Officer of Guggenheim Investments reviewed with, and addressed questions from, the Committee concerning the expense allocation methodology employed in producing the profitability analysis.

The Committee considered other benefits available to the Adviser because of its relationship with the Fund and noted that the Adviser may be deemed to benefit from arrangements whereby an affiliate, Rydex Fund Services, LLC, receives fees from the Fund for (i) providing certain administrative services pursuant to an administration agreement, and (ii) maintaining the books and records of the Fund's securities and cash pursuant to a fund accounting agreement; and that another affiliate, GPIM, receives sub-advisory fees for managing the investment portfolio. The Committee also noted the Adviser's statement that it may benefit from marketing synergies arising from offering a broad spectrum of products, including the Fund. Based on all of the information provided and its review, the Committee determined that Guggenheim Investments' profitability from its relationship with the Fund was not unreasonable.

Economies of Scale: The Committee received and considered information regarding whether there have been economies of scale with respect to the management of the Fund as the Fund's assets grow (primarily through the appreciation of the Fund's investment portfolio), whether the Fund has appropriately benefited from any economies of scale, and whether there is potential for realization of any further economies of scale. The Committee considered whether economies of scale in the provision of services to the Fund were being passed along to the shareholders. In this respect, the Committee considered the Adviser's view that advisory fee breakpoints generally are not relevant given the structural nature of closed-end funds, which do not continuously offer new shares. The Committee also noted the Adviser's statement that a small number of large closed-end fund sponsors implement fund- and complex-level breakpoints. In addition, the Committee took into account the Adviser's view that to the extent the Fund's assets increase over time, the Fund and its shareholders should realize economies of scale as certain expenses, such as fixed fund fees, become a smaller percentage of overall assets. The Committee also noted the Adviser's statement that Guggenheim continues to develop the infrastructure needed to support Fund asset growth and to achieve economies of scale across the firm's various products and product lines. Thus, while Guggenheim may be benefiting from certain economies of scale and related cost efficiencies, it is concurrently realizing new costs and expenses associated with investment in infrastructure, personnel and systems.

Sub-Advisory Agreement

Nature, Extent and Quality of Services Provided by the Sub-Adviser: With respect to the nature, extent and quality of services provided by the Sub-Adviser, the Committee considered the qualifications, experience and skills of the Sub-Adviser's portfolio management and other key personnel and information from the Sub-Adviser describing the scope of its services to the Fund. With respect to Guggenheim's resources and the Sub-Adviser's ability to carry out its responsibilities

under the Sub-Advisory Agreement, the Committee recalled the review of certain unaudited financial information concerning GPIMH by the Chief Financial Officer of Guggenheim Investments, as discussed above. (The Committee received the audited financial statements of GPIM once available following the May Meeting and, as noted, received the audited financial statements of GPIMH once available following the April Meeting.)

The Committee also considered the acceptability of the terms of the Sub-Advisory Agreement. In addition, the Committee considered the Sub-Adviser's efforts in pursuing the Fund's investment objective of seeking to provide a high level of current income and the Fund's secondary objective of long-term capital appreciation. Based on the foregoing, and based on other information received (both oral and written) at the April Meeting and at the May Meeting, as well as other considerations, including the Committee's knowledge of the Sub-Adviser's quality of performance of its duties through Board meetings, discussions and reports during the year, the Committee concluded that the Sub-Adviser and its personnel were qualified to serve the Fund in such capacity and may reasonably be expected to continue to provide a high quality of services under the Sub-Advisory Agreement.

Investment Performance: The Committee reviewed the performance of the Fund and the peer group of funds over various periods of time, noting that prior to May 15, 2011, the Fund employed a different strategy and investment sub-adviser. Although the Fund's return on an NAV basis lagged the median return of its peer group of funds for the three-year and one-year periods ended December 31, 2014 (83rd percentile for both periods), the Fund outperformed the median return of its peer group of funds on an NAV basis for the five-year period ended December 31, 2014, ranking in the 1st percentile. In addition, the Committee observed that the Fund's performance on an NAV basis exceeded the return of the CBOE S&P 500 BuyWrite Index for the five-year, three-year and one-year periods ended December 31, 2014, while lagging the return of the S&P 500 Index over the same periods.

The Committee also took into account Guggenheim's belief that there is no single optimal performance metric, nor is there a single optimal time period over which to evaluate performance and that a thorough understanding of performance comes from analyzing measures of returns, risk and risk-adjusted returns, as well as evaluating strategies both relative to their market benchmarks as well as relative to peer groups of competitor strategies. Thus, the Committee also reviewed and considered the additional performance and risk metrics provided by Guggenheim, including the Fund's standard deviation, tracking error, beta, Sharpe ratio, information ratio and alpha versus the Fund's peers.

After reviewing the foregoing and related factors, the Committee concluded, within the context of its overall conclusions regarding the Advisory Agreements, that the Fund's performance was acceptable.

Comparative Fees, Costs of Services Provided and the Profits Realized by the Sub-Adviser from its Relationship with the Fund: The Committee reviewed the level of sub-advisory fees payable to GPIM, noting that the fees are paid by GFIA and do not impact the fees paid by the Fund. The Committee also reviewed the dollar amount of sub-advisory fees paid to GPIM for the twelve months ended December 31, 2014. In addition, the Committee compared the sub-advisory fee paid by the Adviser to the Sub-Adviser to the fees charged by the Sub-Adviser to other clients including other registered investment companies. The Committee noted the Sub-Adviser's statement that while it manages separate accounts with lower investment advisory fees, the separate accounts are less complex to

manage than are registered funds and that separate account fee rates vary greatly in light of the different services provided to separate accounts and the less burdensome regulatory obligations associated with such accounts.

Economies of Scale: The Committee recognized that, because the SubAdviser's fees are paid by the Adviser and not the Fund, the analysis of economies of scale was more appropriate in the context of the Committee's consideration of the Investment Advisory Agreement, which was separately considered. (See "Investment Advisory Agreement — *Economies of Scale*" above.)

Overall Conclusions

Based on the foregoing, the Committee determined that the investment advisory fees are fair and reasonable in light of the extent and quality of the services provided and other benefits received and that the continuation of each Advisory Agreement is in the best interests of the Fund. In reaching this conclusion, no single factor was determinative or conclusive and each Committee member, in the exercise of his business judgment, may attribute different weights to different factors. At the May Meeting, the Committee, constituting all of the Independent Trustees, recommended the renewal of each Advisory Agreement for an additional 12-month term. Thereafter, on May 20, 2015, the Board, including all of the Independent Trustees, approved the renewal of each Advisory Agreement for an additional 12-month term.

Board of Trustees

Randall C. Barnes

Donald C. Cacciapaglia*

Donald A. Chubb, Jr.

Jerry B. Farley

Roman Friedrich III

Robert B. Karn III

Ronald A. Nyberg

Maynard F. Oliverius

Ronald E. Toupin, Jr.

Chairman

* Trustee is an "interested person" (as defined in section 2(a)(19) of the 1940 Act) ("Interested Trustee") of the Trust because of his position as the President and CEO of the Investment Adviser and the Sub-Adviser.

Principal Executive Officers

Donald C. Cacciapaglia

President and Chief Executive Officer

Joanna M. Catalucci

Chief Compliance Officer

Amy J. Lee

Chief Legal Officer

Mark E. Mathiasen

Secretary

John L. Sullivan

Chief Financial Officer,

Chief Accounting Officer

and Treasurer

Investment Adviser

Guggenheim Funds

Investment Advisors, LLC

Chicago, IL

Investment Sub-Adviser

Guggenheim Partners Investment

Management, LLC

Santa Monica, CA

Accounting Agent and Administrator

Rydex Fund Services, LLC

Rockville, MD

Custodian

The Bank of New York Mellon Corp.

New York, NY

Legal Counsel

Skadden, Arps, Slate, Meagher

& Flom LLP

New York, NY

Independent Registered Public**Accounting Firm**

Ernst & Young LLP

McLean, VA

Privacy Principles of Guggenheim Enhanced Equity Strategy Fund for Shareholders

The Fund is committed to maintaining the privacy of its shareholders and to safeguarding its non-public personal information. The following information is provided to help you understand what personal information the Fund collects, how we protect that information and why, in certain cases, we may share information with select other parties.

Generally, the Fund does not receive any non-public personal information relating to its shareholders, although certain non-public personal information of its shareholders may become available to the Fund. The Fund does not disclose any non-public personal information about its shareholders or former shareholders to anyone except as permitted by law or as is necessary in order to service shareholder accounts (for example, to a transfer agent or third party administrator).

The Fund restricts access to non-public personal information about the shareholders to Guggenheim Funds Investment Advisors, LLC employees with a legitimate business need for the information. The Fund maintains physical, electronic and procedural safeguards designed to protect the non-public personal information of its shareholders.

Questions concerning your shares of Guggenheim Enhanced Equity Strategy Fund?

- If your shares are held in a Brokerage Account, contact your Broker.
- If you have physical possession of your shares in certificate form, contact the Fund's Transfer Agent:

Computershare Trust Company, N.A., P.O. Box 30170 College Station, TX 77842-3170; (866) 488-3559 or online at www.computershare.com/investor

This report is sent to shareholders of Guggenheim Enhanced Equity Strategy Fund for their information. It is not a Prospectus, circular or representation intended for use in the purchase or sale of shares of the Fund or of any securities mentioned in this report.

A description of the Fund's proxy voting policies and procedures related to portfolio securities is available without charge, upon request, by calling the Fund at (866) 392-3004.

Information regarding how the Fund voted proxies for portfolio securities, if applicable, during the most recent 12-month period ended June 30, is also available, without charge and upon request by calling (866) 392-3004, by visiting the Fund's website at guggenheiminvestments.com/gge or by accessing the Fund's Form N-PX on the U.S. Securities and Exchange Commission's (SEC) website at www.sec.gov.

The Fund files its complete schedule of portfolio holdings with the SEC for the first and third quarters of each fiscal year on Form N-Q. The Fund's Form N-Q is available on the SEC website at www.sec.gov or at guggenheiminvestments.com/gge. The Fund's Form N-Q may also be viewed and copied at the SEC's Public Reference Room in Washington, DC; information on the operation of the Public Reference Room may be obtained by calling (800) SEC-0330.

Notice to Shareholders

Notice is hereby given in accordance with Section 23(c) of the Investment Company Act of 1940, as amended, that the Fund from time to time may purchase shares of its common stock in the open market or in private transactions.

ABOUT THE FUND MANAGERS

Guggenheim Partners Investment Management, LLC

Guggenheim Partners Investment Management, LLC (“GPIM”) is an indirect subsidiary of Guggenheim Partners, LLC, a diversified financial services firm. The firm provides capital markets services, portfolio and risk management expertise, wealth management, and investment advisory services. Clients of Guggenheim Partners, LLC subsidiaries are an elite mix of individuals, family offices, endowments, foundations, insurance companies and other institutions.

Investment Philosophy

GPIM’s investment philosophy is predicated upon the belief that thorough research and independent thought are rewarded with performance that has the potential to outperform benchmark indexes with both lower volatility and lower correlation of returns over time as compared to such benchmark indexes.

Investment Process

GPIM’s investment process is a collaborative effort between various groups including the Portfolio Construction Group, which utilize proprietary portfolio construction and risk modeling tools to determine allocation of assets among a variety of sectors, and its Sector Specialists, who are responsible for security selection within these sectors and for implementing securities transactions, including the structuring of certain securities directly with the issuers or with investment banks and dealers involved in the origination of such securities.

Guggenheim Funds Distributors, LLC
227 West Monroe Street
Chicago, IL 60606
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