GUGGENHEIM ENHANCED EQUITY STRATEGY FUND
Form N-CSR
January 07, 2016

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM N-CSR

CERTIFIED SHAREHOLDER REPORT OF REGISTERED MANAGEMENT INVESTMENT COMPANIES

Investment Company Act file number 811-21455

Guggenheim Enhanced Equity Strategy Fund
(Exact name of registrant as specified in charter)

227 West Monroe Street
Chicago, IL 60606
(Address of principal executive offices) (Zip code)

Amy J. Lee
227 West Monroe Street
Chicago, IL 60606
(Name and address of agent for service)

Registrant's telephone number, including area code: (312) 827-0100

Date of fiscal year end: October 31

Date of reporting period: November 1, 2015 - October 31, 2015

Item 1. Reports to Stockholders.

The registrant's annual report transmitted to shareholders pursuant to Rule 30e-1 under the Investment Company Act of 1940, as amended (the “Investment Company Act”), is as follows:

GUGGENHEIMINVESTMENTS.COM/GGE

...YOUR PATH TO THE LATEST, MOST UP-TO-DATE INFORMATION ABOUT THE GUGGENHEIM ENHANCED EQUITY STRATEGY FUND

The shareholder report you are reading right now is just the beginning of the story.

Online at guggenheiminvestments.com/gge, you will find:

• Daily, weekly and monthly data on share prices, net asset values, dividends and more

• Portfolio overviews and performance analyses

• Announcements, press releases and special notices

• Fund and adviser contact information

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.

(Unaudited) October 31, 2015

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,

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

QUESTIONS & ANSWERS (Unaudited) October 31, 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 Minerd, 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 SUMMARY (Unaudited) October 31, 2015

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.

FUND SUMMARY (Unaudited) continued October 31, 2015

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 Trust1	293,622	$ 61,052,823
iShares S&P 500 Growth ETF1	206,666	24,384,521
iShares S&P 500 Value ETF1	240,904	21,736,768
PowerShares QQQ Trust Series 11	131,743	14,930,434
iShares Russell 2000 Index ETF1	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.

PORTFOLIO OF INVESTMENTS (continued) October 31, 2015

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
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.

FINANCIAL HIGHLIGHTS October 31, 2015

	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.

FINANCIAL HIGHLIGHTS continued October 31, 2015

	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)

NOTES TO FINANCIAL STATEMENTS continued October 31, 2015

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).