

Guggenheim Enhanced Equity Income Fund (f/k/a Old Mutual/Claymore Long-Short Fund)
Form N-CSR
March 07, 2017

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 811-21681 .
Guggenheim Enhanced Equity Income Fund
(Exact name of registrant as specified in charter)
227 W. Monroe Street, Chicago, IL 60606
(Address of principal executive offices) (Zip code)
Amy J. Lee
227 W. 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: December 31
Date of reporting period: January 1, 2016 to December 31, 2016

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/GPM

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

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

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

· Daily, weekly and monthly data on share prices, distributions and more

· Portfolio overviews and performance analyses

· Announcements, press releases and special notices

· Fund and adviser contact information

Guggenheim Partners Investment Management, LLC and Guggenheim Funds Investment Advisors, LLC 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) December 31, 2016

DEAR SHAREHOLDER:

We thank you for your investment in the Guggenheim Enhanced Equity Income Fund (the “Fund”). This report covers the Fund’s performance for the 12-month period ended December 31, 2016.

The Fund’s primary investment objective is to seek a high level of current income and gains with a secondary objective of long-term capital appreciation.

For the 12 months ended December 31, 2016, the Fund provided a total return based on market price of 17.86% and a total return net of fees based on NAV of 11.87%. All Fund returns cited—whether based on net asset value (“NAV”) or market price—assume the reinvestment of all distributions. Past performance does not guarantee future results. The NAV return includes the deduction of management fees, operating expenses, and all other Fund expenses.

On December 31, 2016, the Fund’s closing market price of \$8.00 per share represented a discount of 4.19% to its NAV of \$8.35 per share. 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.

In each quarter of the period, the Fund paid a distribution of \$0.24 per share, continuing a practice in effect since June 2009. The most recent distribution represents an annualized distribution rate of 12.00% based on the Fund’s closing market price of \$8.00 as of December 31, 2016. Please see Note 2(d) on page 22 for more information on distributions for the period.

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

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

(Unaudited) continued December 31, 2016

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 December 31, 2016, we encourage you to read the Questions & Answers section of the 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/gpm.

Sincerely,

Donald C. Cacciapaglia

President and Chief Executive Officer

Guggenheim Enhanced Equity Income Fund

January 31, 2017

4 | GPM | GUGGENHEIM ENHANCED EQUITY INCOME FUND ANNUAL REPORT

QUESTIONS & ANSWERS (Unaudited) December 31, 2016

The Guggenheim Enhanced Equity Income Fund (the “Fund”) is managed by a team of seasoned professionals at Guggenheim Partners Investment Management, LLC (“GPIM” or the “Sub-Adviser”). This team includes B. Scott Miner, Chairman of Investments and Global Chief Investment Officer; Anne Bookwalter Walsh, CFA, JD, Assistant Chief Investment Officer and Senior Managing Director; Farhan Sharaff, Assistant Chief Investment Officer, Equities; Jayson Flowers, Senior Managing Director and Head of Equity and Derivative Strategies; Qi Yan, Managing Director and Portfolio Manager; and Daniel Cheeseman, Director and Portfolio Manager. In the following interview, the investment team discusses the market environment and the Fund’s performance for the 12-month period ended December 31, 2016.

Please describe the Fund’s investment objective and explain how GPIM’s investment strategy seeks to achieve it. The Fund’s primary investment objective is to seek a high level of current income and gains with a secondary objective of long-term capital appreciation. Under normal market conditions, 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 objective 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. Although the use of financial leverage by the Fund may create an opportunity for increased return for the common shares, it also results in additional risks and can magnify the effect of any losses. There can be no assurance that a leveraging strategy will be successful during any period during which it is employed.

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. The Fund holds liquid securities, 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, write options on 100% of the equity holdings in its portfolio. The typical hedge ratio (i.e. the percentage of the Fund’s equity holdings on which options are written) 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 GPIM’s macroeconomic views. Changing the hedge ratio will impact the beta (represents the systematic risk of a portfolio and

QUESTIONS & ANSWERS (Unaudited) continued December 31, 2016

measures its sensitivity to a benchmark) of the portfolio resulting in a portfolio that is either over- or underexposed to broad market equities.

GPIM may engage in selling call options on indices, which could include securities that are not specifically held by the Fund. 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.

To a lesser extent, the Fund may also write call options on securities, including ETFs, that are not held by the Fund, or on indices other than the indices tracked by the ETFs held by the Fund. As such transactions would involve uncovered option writing, they may be subject to more risks compared to the Fund's covered call option strategies involving writing options on securities, including ETFs, held by the Fund or indices tracked by the ETFs held by the Fund.

When the Fund writes uncovered call options it will earmark or segregate cash or liquid securities in accordance with applicable interpretations of the staff of the Securities and Exchange Commission (SEC).

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.

Provide an update on the Guggenheim equity closed-end funds merger proposals.

Guggenheim Investments recently announced certain proposals that affect its three enhanced equity closed-end funds, including Guggenheim Enhanced Equity Income Fund (GPM). The proposals involved the reorganization of GPM from a Massachusetts business trust to a Delaware statutory trust through a process known as redomestication and the mergers of each of Guggenheim Enhanced Equity Strategy Fund (GGE), and Guggenheim Equal Weight Enhanced Equity Income Fund (GEQ), with and into GPM (together, the "Proposals").

At a Special Meeting of Shareholders held on February 13, 2017, shareholders of record of each of GGE, GPM and GEQ voted to approve the Proposals. Subject to the satisfaction of certain customary closing conditions, the redomestication of GPM and the mergers of each of GGE and GEQ with and into GPM are expected to be effective with the open of the New York Stock Exchange (NYSE) on March 20, 2017.

No changes to GPM's investment policies are being made in connection with the Proposals, however, following completion of the mergers, GPM will seek to obtain equity exposure through a combination of investment in individual equity securities and ETFs, and will continue to utilize an option writing

QUESTIONS & ANSWERS (Unaudited) continued December 31, 2016

strategy. This enhanced equity strategy is anticipated to combine the best elements of the existing Funds' investment strategies while maintaining the same investment objective.

Please provide an overview of the economic and market environment during the 12 months ended December 31, 2016. Behind the performance numbers for the past 12 months are a multitude of events that unfolded throughout 2016, including an increase in U.S. corporate defaults, several quarters of negative earnings growth, stubbornly low inflation across the globe, the British vote to exit the European Union, and a U.S. presidential election outcome that defied investor expectations and polling trends. That was on top of one of the worst selloffs for U.S. corporate bonds since the financial crisis in the first six weeks of the year, and one of the worst selloffs in government bonds since 2013's taper tantrum in the fourth quarter, and the Standard & Poor's 500® ("S&P 500") Index falling almost 11% early in the year. Nevertheless, or perhaps because of pre-election turmoil, between election day and the end of December, the S&P 500 rallied 4.6%, high-yield spreads tightened 83 basis points, and 10-year Treasury yields rose 57 basis points. The market reaction to the outcome of the U.S. presidential election set the stage for the U.S. Federal Reserve (the "Fed") to raise target interest rates by 25 basis points from a range of 0.25–0.50% to 0.50–0.75% in December. More importantly, the Federal Open Market Committee ("FOMC") now projects three rate increases in 2017, up from two in September.

The upward shift appears to reflect the view that there may be less room for accommodative policy to continue in light of recent labor market data. We believe the participation rate introduces meaningful uncertainty to the pace of Fed tightening. In 2016, a rising participation rate helped keep the Fed at bay for most of the year as it stabilized the unemployment rate slightly above what the Fed considers full employment. However, the participation trend reversed in October and November, causing the unemployment rate to decline to only 4.7% by December.

Early indications that fiscal spending (and/or tax cuts) will be prioritized in the new administration suggest that the risks to real Gross Domestic Product ("GDP") growth in 2017 and 2018 are now skewed to the upside. U.S. real GDP grew by 3.5% in the third quarter, up from 1.4% in the second quarter. We expect output to rise by around 2% on average in coming quarters, a bit faster than the trend rate over the past year, as drags from past dollar strength and an inventory adjustment cycle fade.

A post-election rise in consumer confidence, along with continued income growth and healthier household balance sheets, bodes well for consumption in the coming quarters. The trend rate of job growth should slow as we near full employment. Even so, the unemployment rate should continue to fall toward 4.0% as employment growth outstrips labor force growth. A tighter labor market will begin to put more upward pressure on wage growth, which is being held back by meager productivity gains. An improving labor market, low borrowing costs, and rising household formation will continue to bolster housing, as evidenced by housing starts at cyclical highs. Key inflation measures will rise over the next year due to energy price base effects and reductions in labor market slack.

Given our view that the Fed will raise rates three, possibly four, times in 2017, the effects of monetary policy divergence will be important to watch as two major central banks, the European Central Bank

QUESTIONS & ANSWERS (Unaudited) continued December 31, 2016

(“ECB”) and the Bank of Japan (“BOJ”), continue their purchase programs. In December, the ECB committed to extend its asset-purchase program through the end of 2017, albeit at a reduced monthly pace of €60 billion (from €80 billion currently) beginning in April. The ECB also changed its criteria for asset purchases, allowing the purchase of sovereign bonds with yields lower than the -0.40% deposit rate. In our view, the extension of the program to at least the end of 2017 makes it highly likely that the ECB will continue to buy assets well into 2018. The growing gap in policy rates and global yields could drive further U.S. dollar appreciation, which would weigh on oil prices and stem the recovery in the energy market. Currently, our oil model projects oil prices will remain below \$60 per barrel through the end of 2017.

How did the Fund perform for the 12 months ended December 31, 2016?

For the 12 months ended December 31, 2016, the Fund provided a total return based on market price of 17.86% and a total return net of fees based on NAV of 11.87%. All Fund returns cited—whether based on net asset value (“NAV”) or market price—assume the reinvestment of all distributions. Past performance does not guarantee future results. The NAV return includes the deduction of management fees, operating expenses, and all other Fund expenses.

On December 31, 2016, the Fund’s closing market price of \$8.00 per share represented a discount of 4.19% to its NAV of \$8.35 per share. On December 31, 2015, the Fund’s closing market price of \$7.68 per share represented a discount of 8.24% to its NAV of \$8.37 per share. 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.

In each quarter of the period, the Fund paid a distribution of \$0.24 per share, continuing a practice in effect since June 2009. The most recent distribution represents an annualized distribution rate of 12.0% based on the Fund’s closing market price of \$8.00 as of December 31, 2016. Please see Note 2(d) on page 22 for more information on distributions for the period.

Discuss market volatility over the period.

The first half of 2016 was marked by the market selloff that began the year and ended in February, as the S&P 500 fell 10.3%. The S&P 500 quickly recovered by 15.9% only to sharply drop 5% in the two days following the June Brexit vote. But the S&P 500 rallied to new highs in August and tacked on a 4.6% jump between election day and the end of December. That was in spite of indications by the equity futures market that the major U.S. indices would open deeply negative on the day after the election. For the year, the S&P 500 Index rose 11.96%.

Amid concerns of slowing global growth and the turmoil of falling energy prices in early 2016, market implied volatility as measured by the Chicago Board Options Exchange Volatility Index (“VIX”) surged as high as 30 intraday in February, steadily declined until a spike at the Brexit vote, then resumed its downward path to 11.43 in August. Volatility resumed in the fall, with a spike in September as the market reacted to rising interest rates with sector rotation into cyclical stocks, and again amid the outcome of the November U.S. presidential election. The VIX continued its way down through the rest of 2016, reaching its lowest point in two years in late December. For the year, the VIX fell about 23%.

QUESTIONS & ANSWERS (Unaudited) continued December 31, 2016

What most influenced the Fund's performance?

The models used in the strategy attempt to collect the implied-realized premium inherent in index options. It tends to outperform when market implied volatility exceeds future realized volatility. Sustained periods of volatility are beneficial to the strategy, while a rapidly changing market rise is a headwind.

For the period, the return on the underlying portfolio holdings was a contributor to performance. The Fund benefited from the allocation to ETFs that track the S&P 500, its largest, and a solidly-performing index for the period, although indices for many risk assets (including small- and mid-cap stocks, and high yield bonds) outperformed the S&P 500 for the period. For the period as a whole, the Fund's derivative use contributed to the Fund's return.

The implied-realized volatility spread was rich in early 2016, which was a tailwind for the Fund as it was able to sell volatility near the VIX's peak for the period. Rather than at monthly points, selling options as volatility increases enables the Fund to monetize these spikes. The Fund continued to perform steadily with the market recovery and rapid decline in volatility through Memorial Day. The quick decline and rapid recovery around Brexit had a neutral effect on the Fund, but from then until the end of the period, the Fund was unable to keep pace with the S&P 500, as volatility stabilized later in the year, with fewer unexpected market shocks. Even though the Fund finished about even with the S&P 500 at year end, it had an annualized distribution rate of 12%, compared with a S&P 500 dividend yield of about 2%.

There are possible market scenarios which could push volatility sharply higher, such as further interest rate increases, the implementation of policies from a new U.S. presidential administration, and the impact of European populist movements on key elections. A persistently low volatility market from continued central bank accommodation would be expected to be positive contributing. However, a shift to a sustainable higher volatility market would also be a net positive, so long as the transition between low and high volatility is gradual.

Can you discuss the impact of leverage in the Fund?

The Fund's total return was above that of the cost of leverage. Therefore, on a simple comparison, the use of leverage contributed to shareholder returns. Leverage at the end of the period was about 31% of the Fund's total managed assets. Our approach to leverage is dynamic, and we tend to have a higher level of leverage when we are more constructive on equity market returns in accordance with our macroeconomic outlook and when we believe volatility is most attractive.

Our economic outlook remains positive, as the U.S. expansion continues. Lower rates in Europe and Japan will continue to direct capital into the U.S., keeping pressure on rates. This should support economic growth, in particular housing activity, and reduce the near-term risk for a recession in the U.S.

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. Please see "Borrowings" under Note 8 on page 28 for more information on the Fund's credit facility agreement.

QUESTIONS & ANSWERS (Unaudited) continued December 31, 2016

Index Definitions

Indices are unmanaged, reflect no expenses and it is not possible to invest directly in an index.

The CBOE 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 Index 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 Index over the next 30-day period, which is then annualized.

The S&P 500 Index is an unmanaged, 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.

Risks and Other Considerations

Investing involves risk, including the possible loss of principal and fluctuation of value.

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 expressed for informational purposes only and are subject to change at any time, based on market and other conditions, and may not come to pass. These views may differ from views of other investment professionals at Guggenheim and should not be construed as research, investment advice or a recommendation of any kind regarding the fund or any issuer or security, do not constitute a solicitation to buy or sell any security and should not be considered specific legal, investment or tax advice. The information provided does not take into account the specific objectives, financial situation or particular needs of any specific investor.

The views expressed in this report may also include forward looking statements that involve risk and uncertainty, and there is no guarantee that any predictions will come to pass. Actual results or events may differ materially from those projected, estimated, assumed or anticipated in any such forward-looking statements. Important factors that could result in such differences, in addition to the other factors noted with such forward-looking statements, include general economic conditions such as inflation, recession and interest rates.

There can be no assurance that the Fund will achieve its investment objectives or that any investment strategies or techniques discussed herein will be effective. 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.

Performance data quoted represents past performance, which is no guarantee of future results and current performance may be lower or higher than the figures shown.

Please see guggenheiminvestments.com/gpm for a detailed discussion about Fund risks and considerations.

FUND SUMMARY (Unaudited) December 31, 2016

Fund Statistics

| | |
|--------------------|-----------|
| Share Price | \$8.00 |
| Net Asset Value | \$8.35 |
| Discount to NAV | -4.19% |
| Net Assets (\$000) | \$159,229 |

AVERAGE ANNUAL TOTAL
RETURNS
FOR THE PERIOD ENDED
DECEMBER 31, 2016¹

| | One Year | Three Year | Five Year | Ten Year | Since Inception (08/25/05) |
|---|-------------|---------------|--------------|-------------|----------------------------------|
| Guggenheim Enhanced Equity Income Fund | | | | | |
| NAV | 11.87% | 6.90% | 8.90% | 2.53% | 3.08% |
| Market | 17.86% | 8.63% | 11.45% | 3.32% | 3.14% |

Performance data quoted represents past performance, which is no guarantee of future results and current performance may be lower or higher than the figures shown. All NAV returns include the deduction of management fees, operating expenses and all other Fund expenses. The deduction of taxes that a shareholder would pay on Fund distributions or the redemption of Fund shares is not reflected in the total returns. For the most recent month-end performance figures, please visit guggenheiminvestments.com/gpm. The investment return and principal value of an investment will fluctuate with changes in market conditions and other factors so that an investor's shares, when redeemed, may be worth more or less than their original cost.

¹Performance prior to June 22, 2010, under the name Old Mutual/Claymore Long-Short Fund was achieved through an investment strategy of a long-short strategy and an opportunistic covered call writing strategy by the previous investment sub-adviser, Analytic Investors, LLC, and factors in the Fund's fees and expenses.

| Portfolio Breakdown | % of Net Assets |
|---------------------------------|-----------------|
| Exchange-Traded Funds | 142.8% |
| Options Written | -0.9% |
| Total Investments | 141.9% |
| Other Assets & Liabilities, net | -41.9% |
| Net Assets | 100.0% |

FUND SUMMARY (Unaudited) continued December 31, 2016

Portfolio breakdown is subject to change daily. For more information, please visit guggenheiminvestments.com/gpm. The above summaries are provided for informational purposes only and should not be viewed as recommendations. Past performance does not guarantee future results. All or a portion of the above distributions may be characterized as a return of capital. For the year ended December 31, 2016, 49.10% of the distributions were characterized as income and 50.90% of the distributions were characterized as return of capital.

12 | GPM | GUGGENHEIM ENHANCED EQUITY INCOME FUND ANNUAL REPORT

PORTFOLIO OF INVESTMENTS December 31, 2016

| | Shares | Value |
|---|---------|----------------|
| EXCHANGE-TRADED FUNDS [†] – 142.8% | | |
| SPDR S&P 500 ETF Trust ^{1,2} | 455,812 | \$ 101,887,656 |
| iShares S&P 500 Growth ETF ² | 332,156 | 40,453,279 |
| iShares S&P 500 Value ETF ² | 370,268 | 37,537,770 |
| iShares Russell 2000 Index ETF ^{1,2} | 177,535 | 23,940,595 |
| PowerShares QQQ Trust Series 1 ^{1,2} | 199,850 | 23,678,228 |
| Total Exchange-Traded Funds (Cost \$228,481,563) | | 227,497,528 |
| Total Investments – 142.8% (Cost \$228,481,563) | | 227,497,528 |

| | Contracts (100 shares per Contract) | Value |
|---|---|----------------|
| OPTIONS WRITTEN [†] – (0.9)% | | |
| Call options on: | | |
| NASDAQ 100 Index Expiring January 2017 with strike price of \$4,925.00* | 97 | \$(370,055) |
| S&P 500 Index Expiring January 2017 with strike price of \$2,250.00* | 213 | (385,530) |
| Russell 2000 Index Expiring January 2017 with strike price of \$1,360.00* | 353 | (727,180) |
| Total Call Options | | (1,482,765) |
| Total Options Written (Premiums received \$2,006,416) | | (1,482,765) |
| Other Assets & Liabilities, net – (41.9)% | | (66,785,479) |
| Total Net Assets – 100.0% | | \$ 159,229,284 |

* Non-income producing security.

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

1 Security represents cover for outstanding options written.

2 Security has been physically segregated as collateral for borrowings outstanding. As of December 31, 2016, the total market value of segregated securities was \$227,497,528.

S&P Standard & Poor's

See notes to financial statements.

PORTFOLIO OF INVESTMENTS continued December 31, 2016

The following table summarizes the inputs used to value the Fund's investments at December 31, 2016 (See Note 4 in the Notes to Financial Statements):

| Description | Level 1 Quoted Prices | Level 2 Significant Observable Inputs | Level 3 Significant Unobservable Inputs | Total |
|-----------------------|--------------------------|--|--|---------------|
| Assets | | | | |
| Exchange-Traded Funds | \$227,497,528 | \$ — | \$ — | \$227,497,528 |
| Liabilities | | | | |
| Options Written | \$1,482,765 | \$ — | \$ — | \$1,482,765 |

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 end of the current fiscal period. For the year ended December 31, 2016, there were no transfers between levels.

See notes to financial statements.

STATEMENT OF ASSETS AND LIABILITIES December 31, 2016

ASSETS:

| | |
|--|---------------|
| Investments, at value (cost \$228,481,563) | \$227,497,528 |
| Cash | 4,399,337 |
| Segregated cash due to broker | 566,111 |
| Receivables: | |
| Dividends | 602,356 |
| Other assets | 4,145 |
| Total assets | 233,069,477 |

LIABILITIES:

| | |
|--|----------------|
| Borrowings | 72,000,000 |
| Options written, at value (Premiums received of \$2,006,416) | 1,482,765 |
| Interest payable on borrowings | 95,098 |
| Payable for: | |
| Investment advisory fees | 158,160 |
| Trustees' fees and expenses* | 2,571 |
| Other liabilities | 101,599 |
| Total liabilities | 73,840,193 |
| NET ASSETS | \$ 159,229,284 |

NET ASSETS CONSIST OF:

| | |
|--|----------------|
| Common shares, \$0.01 par value per share; unlimited number of shares authorized, 19,077,318 shares issued and outstanding | \$ 190,773 |
| Additional paid-in capital | 168,348,724 |
| Accumulated net realized loss on investments | (8,849,829) |
| Net unrealized depreciation on investments | (460,384) |
| NET ASSETS | \$ 159,229,284 |
| Net asset value | \$8.35 |

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

STATEMENT OF OPERATIONS December 31, 2016
For the Year Ended December 31, 2016

INVESTMENT INCOME:

| | |
|-------------------------|-------------|
| Dividends | \$4,382,848 |
| Total investment income | 4,382,848 |

EXPENSES:

| | |
|------------------------------|-----------|
| Investment advisory fees | 2,089,008 |
| Interest expense | 860,012 |
| Professional fees | 119,283 |
| Trustees' fees and expenses* | 81,265 |
| Fund accounting fees | 64,817 |
| Administration fees | 61,422 |
| Printing fees | 35,029 |
| Registration and filings | 23,790 |
| Transfer agent fees | 19,265 |
| Custodian fees | 18,961 |
| Insurance | 10,920 |
| Other expenses | 1,575 |
| Total expenses | 3,385,347 |

Less:

| | |
|----------------------------|------------|
| Expenses waived by advisor | (232,112) |
| Net expenses | 3,153,235 |
| Net investment income | 1,229,613 |

NET REALIZED AND UNREALIZED GAIN (LOSS):

Net realized gain (loss) on:

| | |
|-------------------|--------------|
| Investments | 12,697,302 |
| Options written | (4,417,447) |
| Net realized gain | 8,279,855 |

Net change in unrealized appreciation (depreciation) on:

| | |
|--|------------|
| Investments | 8,640,611 |
| Options written | (275,298) |
| Net change in unrealized appreciation (depreciation) | 8,365,313 |

| | |
|----------------------------------|------------|
| Net realized and unrealized gain | 16,645,168 |
|----------------------------------|------------|

| | |
|--|--------------|
| Net increase in net assets resulting from operations | \$17,874,781 |
|--|--------------|

* 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 December 31, 2016

| | Year Ended December 31, 2016 | Year Ended December 31, 2015 |
|--|------------------------------------|------------------------------------|
| INCREASE (DECREASE) IN NET ASSETS FROM OPERATIONS: | | |
| Net investment income | \$ 1,229,613 | \$ 1,179,429 |
| Net realized gain on investments | 8,279,855 | 9,707,322 |
| Net change in unrealized appreciation (depreciation) on investments | 8,365,313 | (8,144,404) |
| Net increase in net assets resulting from operations | 17,874,781 | 2,742,347 |
| DISTRIBUTIONS TO SHAREHOLDERS FROM: | | |
| Net investment income | (8,992,978) | (10,075,669) |
| Return of capital | (9,321,247) | (8,238,556) |
| Total distributions to shareholders | (18,314,225) | (18,314,225) |
| Net decrease in net assets | (439,444) | (15,571,878) |
| NET ASSETS: | | |
| Beginning of year | 159,668,728 | 175,240,606 |
| End of year | \$ 159,229,284 | \$ 159,668,728 |
| Distributions in excess of net investment income at end of year | \$— | \$— |

See notes to financial statements.

STATEMENT OF CASH FLOWS December 31, 2016
For the Year Ended December 31, 2016

| | |
|---|---------------|
| Cash Flows from Operating Activities: | |
| Net Increase in net assets resulting from operations | \$ 17,874,781 |
| 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 | (8,640,611) |
| Net change in unrealized (appreciation) depreciation on options written | 275,298 |
| Net realized gain on investments | (12,697,302) |
| Net realized loss on option written | 4,417,447 |
| Premiums received on options written | 127,754,341 |
| Cost of closed options written | (131,880,096) |
| Purchase of long-term investments | (333,781,073) |
| Proceeds from sale of long-term investments | 365,376,075 |
| Net proceeds from sale of short-term investments | 1,534,463 |
| Corporate actions and other payments | 8,086 |
| Decrease in dividends receivable | 22,301 |
| Decrease in investments sold receivable | 142,086 |
| Decrease in other assets | 2,342 |
| Increase in interest payable on borrowings | 10,960 |
| Decrease in investments purchased payable | (842,946) |
| Decrease in investment advisory fees payable | (6,315) |
| Decrease in fund accounting fees payable | (6,171) |
| Decrease in administration fees payable | (5,385) |
| Decrease in trustees' fees and expenses payable | (1,960) |
| Increase in other liabilities | 8,635 |
| Net Cash Provided by Operating and Investing Activities | \$ 29,564,956 |
| Cash Flows From Financing Activities: | |
| Distributions to common shareholders | (18,314,225) |
| Proceeds from borrowings | 30,000,000 |
| Payments made on borrowings | (38,000,000) |
| Net Cash Used in Financing Activities | (26,314,225) |
| Net increase in cash | 3,250,731 |
| Cash at Beginning of Year | 1,714,717 |
| Cash at End of Year | \$ 4,965,448 |
| Supplemental Disclosure of Cash Flow Information: | |
| Cash paid during the period for interest | \$ 849,052 |

See notes to financial statements.

FINANCIAL HIGHLIGHTS December 31, 2016

This table is presented to show selected data for a share outstanding throughout each period and to assist shareholders in evaluating a Fund's performance for the periods presented.

| | Year Ended December 31, 2016 | Year Ended December 31, 2015 | Year Ended December 31, 2014 | Year Ended December 31, 2013 | Year Ended December 31, 2012 |
|--|--|--|--|--|--|
| Per Share Data: | | | | | |
| Net asset value, beginning of period | \$8.37 | \$9.19 | \$9.47 | \$8.93 | \$9.27 |
| Income from investment operations: | | | | | |
| Net investment income (loss) ^(a) | 0.06 | 0.06 | (0.06) | (0.05) | (0.11) |
| Net gain on investments (realized and unrealized) | 0.88 | 0.08 | 0.74 | 1.55 | 0.73 |
| Total from investment operations | 0.94 | 0.14 | 0.68 | 1.50 | 0.62 |
| Less distributions from: | | | | | |
| Net investment income | (0.47) | (0.53) | (0.96) | (0.69) | (0.96) |
| Return of capital | (0.49) | (0.43) | — | (0.27) | — |
| Total distributions to shareholders | (0.96) | (0.96) | (0.96) | (0.96) | (0.96) |
| Net asset value, end of period | \$8.35 | \$8.37 | \$9.19 | \$9.47 | \$8.93 |
| Market value, end of period | \$8.00 | \$7.68 | \$8.64 | \$8.85 | \$8.20 |
| Total Return^(b) | | | | | |
| Net asset value | 11.87 % | 1.71 % | 7.36 % | 17.60 % | 6.60 % |
| Market value | 17.86 % | 0.28 % | 8.47 % | 20.27 % | 11.52 % |
| Ratios/Supplemental Data: | | | | | |
| Net assets, end of period (in thousands) | \$159,229 | \$159,669 | \$175,241 | \$180,499 | \$170,253 |
| Ratio to average net assets of: | | | | | |
| Net investment income, including interest expense ^(f) | 0.78 % | 0.69 % | (0.69)% | (0.52)% | (1.13)% |
| Total expenses, including interest expense | 2.16 % | 2.03 % | 1.83 % | 1.74 % | 1.87 % |
| Net expenses, including interest expense ^{(c)(d)} | 2.01 % | 1.88 % | 1.69 % | 1.61 % | 1.73 % |
| Portfolio turnover rate | 143 % | 358 % | 664 % | 610 % | 705 % |

See notes to financial statements.

FINANCIAL HIGHLIGHTS continued December 31, 2016

| | Year Ended December 31, 2016 | Year Ended December 31, 2015 | Year Ended December 31, 2014 | Year Ended December 31, 2013 | Year Ended December 31, 2012 |
|---|--|--|--|--|--|
| Senior Indebtedness | | | | | |
| Total Borrowings outstanding (in thousands) | \$ 72,000 | \$ 80,000 | \$ 85,000 | \$ 62,500 | \$ 62,000 |
| Asset Coverage per \$1,000 of indebtedness ^(e) | \$ 3,212 | \$ 2,996 | \$ 3,062 | \$ 3,888 | \$ 3,746 |

(a) Based on average shares outstanding.

Total investment return is calculated assuming an initial investment made at the net asset

(b) value at the beginning of the period, reinvestment of all dividends and distribution at net

asset value during the period, and redemption on the last day of the period. Transaction fees are not reflected in the calculation of total investment return.

Excluding interest expense, the net

(c) expense ratios for the years ended December 31 would be:

| | | | | |
|-------|-------|-------|-------|-------|
| 2016 | 2015 | 2014 | 2013 | 2012 |
| 1.46% | 1.44% | 1.35% | 1.31% | 1.38% |

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

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

(f) Does not include expenses of the underlying funds in which the Fund invests.

See notes to financial statements.

2016 | GPM | GUGGENHEIM ENHANCED EQUITY INCOME FUND ANNUAL REPORT

NOTES TO FINANCIAL STATEMENTS December 31, 2016

Note 1 – Organization:

Guggenheim Enhanced Equity Income Fund (the “Fund”) was organized as a Massachusetts business trust on December 3, 2004. The Fund is registered as a 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 seek to provide a high level of current income and current gains, with a secondary objective of long-term capital appreciation. The Fund seeks to achieve its investment objective by obtaining broadly diversified exposure to the equity markets and utilizing a covered call strategy which will follow a proprietary dynamic rules-based methodology. The Fund seeks to earn income and gains both from dividends paid by the securities owned by the Fund and cash premiums received from selling options.

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. 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 of the most recent bid and ask prices on such day.

NOTES TO FINANCIAL STATEMENTS continued December 31, 2016

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.

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 are fair valued as determined in good faith by Guggenheim Funds Investment Advisors, LLC (“GFIA” or the “Adviser”), subject to review and approval 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: market prices; sale 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 analysis.

(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 amortization of premiums and accretion of discounts, is accrued daily.

(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 to Shareholders

The Fund declares and pays quarterly distributions to shareholders. 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

NOTES TO FINANCIAL STATEMENTS continued December 31, 2016

distribution will be supplemented by short/long-term capital gains and, to the extent necessary, return of capital.

(e) Indemnifications

Under the Fund's organizational documents, its Trustees and Officers are indemnified against certain liabilities arising out of the performance of their duties to the Fund. In addition, throughout the normal course of business, the Fund enters into contracts that contain a variety of representations and warranties which provide general indemnifications. The Fund's maximum exposure under these arrangements is unknown, as this would involve future claims that may be made against the Fund and/or its affiliates that have not yet occurred. However, based on experience, the Fund expects the risk of loss to be remote.

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

Pursuant to an Investment Advisory Agreement (the "Advisory Agreement") between the Fund and Adviser, the Adviser furnishes offices, necessary facilities and equipment, provides administrative services, oversees the activities of Guggenheim Partners Investment Management, LLC ("GPIM" or the "Sub-Adviser"), provides personnel including certain officers required for the Fund's administrative management and compensates the officers and trustees of the Fund who are affiliates of the Adviser. Both GFIA and GPIM are indirect subsidiaries of Guggenheim Partners, LLC ("Guggenheim"), a global diversified financial services firm.

Pursuant to a Sub-Advisory Agreement (the "Sub-Advisory Agreement") among the Fund, the Adviser and the Sub-Adviser, GPIM, under supervision of the Board and the Adviser, 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 1.00% of the average daily value of the Fund's total managed assets. Under the terms of a fee waiver agreement, GFIA and the Fund have contractually agreed to a permanent ten (10) basis point reduction in the advisory fee, such that the Fund pays to the Adviser an investment advisory fee at an annual rate equal to 0.90% of the average daily value of the Fund's total managed assets. Also 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 an additional ten (10) basis points 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 Advisor pays to GPIM a sub-advisory fee equal to 0.40% of the average daily value of the Fund's total managed assets.

For 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.

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

NOTES TO FINANCIAL STATEMENTS continued December 31, 2016

On October 4, 2016, Rydex Fund Services, LLC ("RFS") was purchased by MUFG Investor Services and as of that date RFS ceased to be an affiliate of the Adviser. In connection with its acquisition, RFS changed its name to MUFG Investor Services (US), LLC ("MUIS"). This change has no impact on the financial statements of the Fund. MUIS acts as the Fund's administrator and accounting agent. As administrator and accounting agent, MUIS is responsible for maintaining the books and records of the Fund's securities and cash.

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

For providing the aforementioned services, MUIS and BNY are entitled to receive a monthly fee equal to an annual percentage of the Fund's average daily managed assets subject to certain minimum monthly fees and out of pocket expenses.

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.

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.

NOTES TO FINANCIAL STATEMENTS continued December 31, 2016

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.

At December 31, 2016, the following reclassifications were made to the capital accounts of the Fund to reflect permanent book/tax differences and income gains available for distributions under income tax regulations, which are primarily due to taxable over-distributions. Net realized loss and net assets were not affected by the changes.

| Additional Paid-In Capital | Undistributed Net Investment Income | Accumulated Net Realized Loss |
|----------------------------------|---|-------------------------------------|
| \$ (7,763,365) | \$ 7,763,365 | \$— |

As of December 31, 2016, the cost of securities for Federal income tax purposes, the aggregate gross unrealized gain for all securities for which there was an excess of value over tax cost and the aggregate gross unrealized loss for all securities for which there was an excess of tax cost over value, were as follows:

| Cost of Investments for Tax Purposes | Gross Tax Unrealized Appreciation | Gross Tax Unrealized Depreciation | Net Tax Unrealized Depreciation |
|--|---|---|---------------------------------------|
| \$ 228,517,257 | \$— | \$ (1,019,729) | \$ (1,019,729) |

The difference between book and tax basis unrealized appreciation (depreciation) is primarily attributable to the tax deferral of losses on wash sales and the “marking to market” of non-equity options.

As of December 31, 2016, the tax components of accumulated earnings (excluding paid-in capital) on a tax basis were as follows:

| Undistributed Ordinary Income | Undistributed Long-Term Capital Gains | Accumulated Capital and Other Losses | Net Unrealized Depreciation |
|-------------------------------------|--|--|--------------------------------|
| \$— | \$— | \$ (8,290,484) | \$ (1,019,729) |

For the years ended December 31, 2016 and 2015, the tax character of distributions paid to shareholders as reflected in the Statement of Changes in Net Assets was as follows:

| Distributions paid from: | 2016 | 2015 |
|--------------------------|---------------|---------------|
| Ordinary Income | \$ 8,992,978 | \$ 10,075,669 |
| Return of capital | 9,321,247 | 8,238,556 |
| Total | \$ 18,314,225 | \$ 18,314,225 |

Note: For federal income tax purposes, short-term capital gain distributions are treated as ordinary income distributions.

GPM 1 GUGGENHEIM ENHANCED EQUITY INCOME FUND ANNUAL REPORT 1 25

NOTES TO FINANCIAL STATEMENTS continued December 31, 2016

For Federal income tax purposes, capital loss carryforwards represent realized losses of the Fund that may be carried forward and applied against future capital gains. Under the RIC Modernization Act of 2010, the Fund is permitted to carry forward capital losses incurred in taxable years beginning after December 22, 2010 for an unlimited period and such capital loss carryforwards will retain their character as either short-term or long-term capital losses. As of December 31, 2016, capital loss carryforwards for the Fund was as follows:

| Capital Loss Carryovers Utilized | Capital Loss Expires in 2017 |
|--|------------------------------------|
| \$ 7,763,365 | \$ 8,290,484 |

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:

For the period ended December 31, 2016, the cost of purchases and proceeds from sales of investments, excluding options written and short-term securities, were \$333,781,073 and \$365,376,075, respectively.

Note 7 – Derivatives:

Derivatives are instruments whose values depend on, or are derived from, in whole or in part, the value of one or more other assets, such as securities, currencies, commodities or indices. Derivative instruments may be used to increase investment flexibility (including to maintain cash reserves while maintaining exposure to certain other assets), for risk management (hedging) purposes, to facilitate trading, to reduce transaction costs and to pursue higher investment returns. Derivative instruments may also be used to mitigate certain investment risks, such as foreign currency exchange rate risk, interest rate risk and credit risk. GAAP requires disclosures to enable investors to better understand how and why a Fund uses derivative instruments, how these derivative instruments are accounted for and their effects on the Fund's financial position and results of operations.

The Fund may utilize derivatives for the following purposes:

Hedge – an investment made in order to seek to reduce the risk of adverse price movements in a security, by taking an offsetting position to protect against broad market moves.

Higher Investment Returns – the use of an instrument to seek to obtain increased investment returns.

(a) Options Written

The Fund employs an option strategy in an attempt to generate income and gains from option premiums received from selling options. The Fund intends to pursue its options strategy utilizing a

NOTES TO FINANCIAL STATEMENTS continued December 31, 2016

proprietary dynamic rules-based methodology. The Fund may purchase or sell (write) options on securities and securities indices which are listed on a national securities exchange or in the OTC market as a means of achieving additional return or of hedging the value of the Fund's portfolio.

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 an 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 fair value of the underlying securities 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 fill 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 options written contracts during the period ended December 31, 2016.

Details of the transactions were as follows:

| | Number of Contracts | Premiums Received |
|--|---------------------------|----------------------|
| Options outstanding, beginning of year | 821 | \$1,714,724 |
| Options written, during the year | 38,182 | 127,754,341 |
| Options closed, during the year | (38,340) | (127,462,649) |
| Options outstanding, end of year | 663 | \$2,006,416 |

(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 and Liabilities as of December 31, 2016.

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 | \$1,482,765 |

NOTES TO FINANCIAL STATEMENTS continued December 31, 2016

The following table presents the effect of derivatives instruments on the Statement of Operations for the period ended December 31, 2016.

Effect of Derivative Instruments on the Statement of Operations

| | Amount of Net Realized Gain on Derivatives | Net Change in Unrealized Depreciation on Derivatives |
|-----------------------|---|---|
| Primary Risk Exposure | Options Written | Options Written |
| Equity Risk | \$ (4,417,447) | \$ (275,298) |

Note 8 – Borrowings:

The Fund has entered into a \$90,000,000 committed credit facility agreement with an approved lender whereby the lender has agreed to provide secured financing to the Fund and the Fund will provide the pledged collateral to the lender. Interest on the amount borrowed is based on the 1-month LIBOR plus 0.75%. As of December 31, 2016, there was \$72,000,000 outstanding in connection with the Fund's credit facility. The average daily amount of the borrowings on the credit facility during the period ended December 31, 2016, was \$75,183,060 with a related average interest rate of 1.25%. The maximum amount outstanding during the period was \$80,000,000. As of December 31, 2016, the market value of the securities segregated as collateral is \$227,497,528.

The credit facility agreement governing the loan facility includes usual and customary covenants. These covenants impose on the Fund asset coverage requirements, collateral requirements, investment strategy requirements, and certain financial obligations. These covenants place limits or restrictions on the Fund's ability to (i) enter into additional indebtedness with a party other than the counterparty, (ii) change its fundamental investment policy, or (iii) pledge to any other party, other than to the counterparty, securities owned or held by the Fund over which the counterparty has a lien. In addition, the Fund is required to deliver financial information to the counterparty within established deadlines, maintain an asset coverage ratio (as defined in Section 18(g) of the 1940 Act) greater than 300%, comply with the rules of the stock exchange on which its shares are listed, and maintain its classification as a "closed-end management investment company" as defined in the 1940 Act.

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 9 – Capital:

Common Shares

The Fund has an unlimited amount of common shares, \$0.01 par value, authorized and 19,077,318 shares issued and outstanding. Transactions in common shares were as follows:

| | Year Ended December 31, 2016 | Year Ended December 31, 2015 |
|---|---------------------------------|---------------------------------|
| Beginning shares | 19,077,318 | 19,077,318 |
| Shares issued through dividend reinvestment | — | — |
| Ending shares | 19,077,318 | 19,077,318 |

NOTES TO FINANCIAL STATEMENTS continued December 31, 2016

Note 10 – Merger Approval:

The Boards of Trustees of several Guggenheim equity closed-end funds approved the following mergers at a special joint meeting of the Boards held on August 31, 2016: the merger of each of Guggenheim Enhanced Equity Strategy Fund (“GGE”) and Guggenheim Equal Weight Enhanced Equity Income Fund (“GEQ”) with and into GPM and the redomestication of GPM from a Massachusetts business trust to a Delaware statutory trust.

At a Special Meeting of Shareholders held on February 13, 2017, shareholders of record of each of GGE, GPM and GEQ voted to approve the mergers and the redomestication of GPM. Subject to the satisfaction of certain customary closing conditions, the mergers are expected to be effective with the open of the New York Stock Exchange (NYSE) on March 20, 2017.

Upon completion of the mergers, GGE will merge directly with and into GPM, and shareholders of GGE will become shareholders of GPM and will receive GPM shares, the aggregate net asset value (NAV) (not the market value) of which will equal the aggregate NAV (not the market value) of the GGE Shares held immediately prior to the merger, less merger costs. Additionally, GEQ will merge directly with and into GPM, and shareholders of GEQ will become shareholders of GPM and will receive GPM shares, the aggregate NAV (not the market value) of which will equal the aggregate NAV (not the market value) of the GEQ shares held immediately prior to the merger, less merger costs.

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 adjustment to or disclosure in the Fund’s financial statements.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

December 31,
2016

The Board of Trustees and Shareholders
of Guggenheim Enhanced Equity Income Fund:

We have audited the accompanying statement of assets and liabilities of Guggenheim Enhanced Equity Income Fund (the "Fund"), including the portfolio of investments, as of December 31, 2016, 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 December 31, 2016, 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 Guggenheim Enhanced Equity Income Fund at December 31, 2016, 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 the financial highlights for each of the five years in the period then ended in conformity with U.S. generally accepted accounting principles.

McLean, Virginia

February 28, 2017

30 | GPM | GUGGENHEIM ENHANCED EQUITY INCOME FUND ANNUAL REPORT

SUPPLEMENTAL INFORMATION (Unaudited) December 31, 2016

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 period ended December 31, 2016.

Federal Income Tax Information

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

Of the taxable ordinary income distributions paid during the calendar year ended December 31, 2016, the Fund had 44.51% qualify for the dividends received deduction for corporations.

Of the taxable ordinary income distributions paid during the calendar year ended December 31, 2016, the Fund had 45.10% qualify for the lower income tax rate available to individuals under the Jobs and Growth Tax Relief Reconciliation Act of 2003.

Please refer to your IRS Form 1099 DIV or substitute 1099 DIV as to the federal tax status of the distributions received by you in the calendar year 2016.

Trustees

The Trustees of the Guggenheim Enhanced Equity Income 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 2005 | 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). | 98 | 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). | 95 | Current: Midland Care, Inc. (2011-present). |
| Jerry B. Farley (1946) | Trustee | Since 2014 | Current: President, Washburn University (1997-present). | 95 | Current: Westar Energy, Inc. (2004-present); CoreFirst Bank & Trust (2000-present). |

SUPPLEMENTAL INFORMATION (Unaudited) continued December 31, 2016

| 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: | | | | | |
| Roman Friedrich III (1946) | Trustee and Chairman of the Contracts Review Committee | Since 2011 | Current: Founder and Managing Partner, Roman Friedrich & Company (1998-present). Former: Senior Managing Director, MLV & Co. LLC (2010-2011). | 95 | Current: Zincore Metals, Inc. (2009-present). Former: Axiom Gold and Silver Corp. (2011-2012). |
| Robert B. Karn III (1942) | Trustee and Chairman of the Audit Committee | Since 2011 | Current: Consultant (1998-present). Former: Arthur Andersen (1965-1997) and Managing Partner, Financial and Economic Consulting, St. Louis office (1987-1997). | 95 | Current: Peabody Energy Company (2003-present); GP Natural Resource Partners, LLC (2002-present). |
| Ronald A. Nyberg (1953) | Trustee and Chairman of the Nominating and Governance Committee | Since 2005 | Current: Partner, Momkus McCluskey Roberts LLC (2016-present). Former: Partner, Nyberg & Cassioppi, LLC (2000-2016); Executive Vice President, General Counsel, and Corporate Secretary, Van Kampen Investments (1982-1999). | 100 | 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). | 95 | Current: Fort Hays State University Foundation (1999-present); Stormont-Vail Foundation (2013-present); University of Minnesota MHA Alumni Philanthropy Committee (2009-present). Former: Topeka Community Foundation (2009-2014). |

SUPPLEMENTAL INFORMATION (Unaudited) continued December 31, 2016

| 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 E. Toupin, Jr. (1958) | Trustee and Chairman of the Board | Since 2005 | 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). | 97 | Former: Bennett Group of Funds (2011-2013). |
| 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). | 230 | Current: Clear Spring Life Insurance Company (2015-present); Guggenheim Partners Japan, Ltd. (2014-present); Guggenheim Partners Investment Management Holdings, LLC (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.

This is the period for which the Trustee began serving the Fund. 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. Barnes, Cacciapaglia and Chubb are Class I Trustees. The Class I Trustees are expected to stand for

* re-election at the Fund's annual meeting of shareholders for the fiscal year ending December 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 the fiscal year ending December 31, 2018.

—Messrs. Karn, Oliverius and Toupin, are Class III Trustees. The Class III Trustees are expected to stand for re-election at the Fund's annual meeting of shareholders for the fiscal year ending December 31, 2019.

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

SUPPLEMENTAL INFORMATION (Unaudited) continued December 31, 2016

Officers

The Officers of the Guggenheim Enhanced Equity Income 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 |
|--|------------------------------------|---|--|
| Officers: William H. Belden, III (1965) | Vice President | Since 2014 | 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). |
| Joanna M. Catalucci (1966) | Chief Compliance Officer | Since 2012 | Current: Chief Compliance Officer, certain funds in the Fund Complex (2012-present); Senior Managing Director, Guggenheim Investments (2012-present). AML Officer, certain funds in the Fund Complex (2016-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 2006 | 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). |
| Keith Kemp (1960) | Assistant Treasurer | Since 2016 | Current: Treasurer and Assistant Treasurer, certain other funds in the Fund Complex (2010-present); Managing Director, Guggenheim Partners Investment Management, LLC (2015-present); Chief Financial Officer, Guggenheim Specialized Products, LLC (2016-present). Former: Managing Director and Director, Transparent Value, LLC (2010-2016); Director, Guggenheim Investments (2010-2015); Chief Operating Officer, Macquarie Capital Investment Management (2007-2009). |

341 GPM1 GUGGENHEIM ENHANCED EQUITY INCOME FUND ANNUAL REPORT

SUPPLEMENTAL INFORMATION (Unaudited) continued December 31, 2016

| Name, Address* and Year of Birth Officers continued: | Position(s) held with the Trust | Term of Office and Length of Time Served** | Principal Occupations During Past Five Years |
|--|---------------------------------------|---|---|
| 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 2007 | Current: Secretary, certain other funds in the Fund Complex (2007-present); Managing Director, Guggenheim Investments (2007-present). |
| Glenn McWhinnie (1969) | Assistant Treasurer | Since 2016 | Current: Vice President, Guggenheim Investments (2009-present). Former: Tax Compliance Manager, Ernst & Young LLP (1996-2009). |
| Michael P. Megaris (1984) | Assistant Secretary | Since 2014 | Current: Assistant Secretary, certain other funds in the Fund Complex (April 2014-present); Vice President, Guggenheim Investments (2012-present). Former: J.D., University of Kansas School of Law (2009-2012). |
| Adam J. Nelson (1979) | Assistant Treasurer | Since 2015 | Current: Vice President, Guggenheim Investments (2015-present); Assistant Treasurer, certain other funds in the Fund Complex (2015-present). 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). |
| Kimberly J. Scott (1974) | Assistant Treasurer | Since 2012 | Current: Vice President, Guggenheim Investments (2012-present); Assistant Treasurer, certain other funds in the Fund Complex (2012-present). 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).

GPM 1 GUGGENHEIM ENHANCED EQUITY INCOME FUND ANNUAL REPORT 1 35

SUPPLEMENTAL INFORMATION (Unaudited) continued December 31, 2016

| Name, Address* and Year of Birth Officers continued: | Position(s) held with the Trust | Term of Office and Length of Time Served** | Principal Occupations During Past Five Years |
|---|---|---|---|
| Bryan Stone (1979) | Vice President | Since 2014 | Current: Vice President, certain other funds in the Fund Complex (2014-present); Director, Guggenheim Investments (2013-present). Former: Senior Vice President, Neuberger Berman Group LLC (2009-2013); Vice President, Morgan Stanley (2002-2009). |
| John L. Sullivan (1955) | Chief Financial Officer, Chief Accounting Officer and Treasurer | Since 2010 | Current: CFO, Chief Accounting Officer and Treasurer, certain other funds in the Fund Complex (2010-present); Senior Managing Director, Guggenheim Investments (2010-present). 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). |

* 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 Fund.

DIVIDEND REINVESTMENT PLAN (Unaudited) December 31, 2016

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 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.

DIVIDEND REINVESTMENT PLAN (Unaudited) continued December 31, 2016

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.

This Page Intentionally Left Blank.

GPM 1 GUGGENHEIM ENHANCED EQUITY INCOME FUND ANNUAL REPORT 1 39

This Page Intentionally Left Blank.

40 | GPM | GUGGENHEIM ENHANCED EQUITY INCOME FUND ANNUAL REPORT

This Page Intentionally Left Blank.

GPM 1 GUGGENHEIM ENHANCED EQUITY INCOME FUND ANNUAL REPORT 1 41

FUND INFORMATION December 31, 2016

| | |
|---|------------------------------------|
| Board of Trustees | Investment Adviser |
| Randall C. Barnes | Guggenheim Funds Investment |
| Donald C. Cacciapaglia* | Advisors, LLC |
| Donald A. Chubb, Jr. | Chicago, IL |
| Jerry B. Farley | |
| Roman Friedrich III | Investment Sub-Adviser |
| Robert B. Karn III | Guggenheim Partners Investment |
| Ronald A. Nyberg | Management, LLC |
| Maynard F. Oliverius | Santa Monica, CA |
| Ronald E. Toupin, Jr., <i>Chairman</i> | |
| | Accounting Agent and Administrator |
| * Trustee is an “interested person” (as defined | MUFG Investor Services (US), LLC |
| in section 2(a)(19) of the 1940 Act) | Rockville, MD |
| (“Interested Trustee”) of the Trust because | Custodian |
| of his position as the President and CEO of | The Bank of New York Mellon |
| the Investment Adviser and the Investment | New York, NY |
| Sub-Adviser. | |
| | Legal Counsel |
| Principal Executive Officers | Skadden, Arps, Slate, Meagher |
| Donald C. Cacciapaglia | & Flom LLP |
| President and Chief Executive Officer | New York, NY |
| | |
| Joanna M. Catalucci | Independent Registered Public |
| Chief Compliance Officer | Accounting Firm |
| | Ernst & Young LLP |
| Amy J. Lee | McLean, VA |
| Chief Legal Officer | |
| | |
| Mark E. Mathiasen | |
| Secretary | |
| | |
| John L. Sullivan | |
| Chief Financial Officer, | |
| Chief Accounting Officer and Treasurer | |

FUND INFORMATION continued December 31, 2016

Privacy Principles of Guggenheim Enhanced Equity Income 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 Income 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 Income 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) 882-0688.

Information regarding how the Fund voted proxies for portfolio securities, if applicable, during the most recent 12-month period ended December 31, is also available, without charge and upon request by calling (866) 882-0688, by visiting the Fund's website at guggenheiminvestments.com/gpm 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 by visiting the Fund's website at guggenheiminvestments.com/gpm. 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 or at www.sec.gov.

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.

GPM 1 GUGGENHEIM ENHANCED EQUITY INCOME FUND ANNUAL REPORT 1 43

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

Member FINRA/SIPC

(02/17)

NOT FDIC-INSURED | NOT BANK-GUARANTEED | MAY LOSE VALUE

CEF-GPM-AR-1216

Item 2. Code of Ethics.

(a) The registrant has adopted a code of ethics (the "Code of Ethics") that applies to its principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions.

(b) No information need be disclosed pursuant to this paragraph.

The registrant has not amended its Code of Ethics during the period covered by the report presented in Item 1 (c) hereto.

The registrant has not granted a waiver or an implicit waiver to its principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions from a provision of its (d) Code of Ethics during the period covered by this report.

(e) Not applicable.

(f)(1) The registrant's Code of Ethics is attached hereto as Exhibit (a)(1).

(2) Not applicable.

(3) Not applicable.

Item 3. Audit Committee Financial Expert.

The registrant's Board of Trustees has determined that it has at least one audit committee financial expert serving on its audit committee (the "Audit Committee"), Robert B. Karn III and Dr. Jerry B. Farley. Mr. Karn and Dr. Farley are each an "independent" Trustee as defined in this Item 3 of Form N-CSR. Mr. Karn qualifies as an audit committee financial expert by virtue of his experience obtained as a managing partner in a public accounting firm, which included an understanding of generally accepted accounting principles ("GAAP") in connection with the accounting for estimates, accruals and reserves and also the review, audit and evaluation of financial statements using GAAP. Dr. Farley qualifies as an audit committee financial expert by virtue of his experience at educational institutions, where his business responsibilities have included all aspects of financial management and reporting.

(Under applicable securities laws, a person who is determined to be an audit committee financial expert will not be deemed an "expert" for any purpose, including without limitation for the purposes of Section 11 of the Securities Act of 1933, as amended, as a result of being designated or identified as an audit committee financial expert. The designation or identification of a person as an audit committee financial expert does not impose on such person any duties, obligations, or liabilities that are greater than the duties, obligations, and liabilities imposed on such person as a member of the Audit Committee and Board of Trustees in the absence of such designation or identification. The designation or identification of a person as an audit committee financial expert pursuant to this Item does not affect the duties, obligations or liability of any other member of the Audit Committee or Board of Trustees.)

Item 4. Principal Accountant Fees and Services.

(a) Audit Fees: the aggregate fees billed for professional services rendered by the principal accountant for the audit of the registrant's annual financial statements or services that are normally provided by the accountant in connection with statutory and regulatory filings or engagements were \$25,451 and \$24,693 for the fiscal years ending December 31, 2016, and December 31, 2015, respectively.

(b) Audit-Related Fees: the aggregate fees billed for assurance and related services by the principal accountant that are reasonably related to the performance of the audit of the registrant's financial statements and are not reported under paragraph 4(a) of this Item were \$3,950 and \$0 for the fiscal years ending December 31, 2016, and December 31, 2015, respectively.

The registrant's principal accountant did not bill fees for non-audit services that required approval by the Audit Committee pursuant to paragraph (c)(7)(ii) of Rule 2-01 of Regulation S-X during the registrant's last two fiscal years.

(c) Tax Fees: the aggregate fees billed for professional services rendered by the principal accountant for tax compliance, tax advice, and tax planning including federal, state and local income tax return preparation and related advice and determination of taxable income and miscellaneous tax advice were \$8,195 and \$7,957 for the fiscal years ending December 31, 2016 and December 31, 2015, respectively.

The registrant's principal accountant did not bill fees for tax services that required approval by the Audit Committee pursuant to paragraph (c)(7)(ii) of Rule 2-01 of Regulation S-X during the registrant's last two fiscal years.

(d) All Other Fees: the aggregate fees billed for products and services provided by the principal accountant, other than the services reported in Items 4(a) through 4(c) were \$0 and \$0 for the fiscal years ending December 31, 2016, and December 31, 2015, respectively.

The registrant's principal accountant did not bill fees for non-audit services or services not included in Items 4(a), (b) or (c) above that required approval by the Audit Committee pursuant to paragraph (c)(7)(ii) of Rule 2-01 of Regulation S-X during the registrant's last two fiscal years.

(e). Audit Committee Pre-Approval Policies and Procedures.

(i) The Audit Committee reviews, and in its sole discretion, pre-approves, pursuant to written pre-approval procedures (A) all engagements for audit and non-audit services to be provided by the principal accountant to the registrant and (B) all engagements for non-audit services to be provided by the principal accountant (1) to the registrant's investment adviser (not including a sub-adviser whose role is primarily portfolio management and is sub-contracted or overseen by another investment adviser) and (2) to any entity controlling, controlled by or under common control with the registrant's investment adviser that provides ongoing services to the registrant; but in the case of the services described in subsection (B)(1) or (2), only if the engagement relates directly to the operations and financial reporting of the registrant; provided that such pre-approval need not be obtained in circumstances in which the pre-approval requirement is

waived under rules promulgated by the Securities and Exchange Commission or New York Stock Exchange listing standards. Sections V.B.2 and V.B.3 of the Audit Committee's revised Audit Committee Charter contain the Audit Committee's Pre-Approval Policies and Procedures and such sections are included below.

V.B.2.Pre-approve any engagement of the independent auditors to provide any non-prohibited services, other than "prohibited non-audit services," to the Trust, including the fees and other compensation to be paid to the independent auditors (unless an exception is available under Rule 2-01 of Regulation S-X).

(a) The categories of services to be reviewed and considered for pre-approval include the following (collectively, "Identified Services"):

Audit Services

- Annual financial statement audits
- Seed audits (related to new product filings, as required)
- SEC and regulatory filings and consents

Audit-Related Services

- Accounting consultations
- Fund merger/reorganization support services
- Other accounting related matters
- Agreed upon procedures reports
- Attestation reports
- Other internal control reports

Tax Services

- Recurring tax services:
 - o Preparation of Federal and state income tax returns, including extensions
 - o Preparation of calculations of taxable income, including fiscal year tax designations
 - o Preparation of annual Federal excise tax returns (if applicable)
 - o Preparation of calendar year excise distribution calculations
 - o Calculation of tax equalization on an as-needed basis
 - o Preparation of the estimated excise distribution calculations on an as-needed basis
 - o Preparation of quarterly Federal, state and local and franchise tax estimated tax payments on an as-needed basis
 - o Preparation of state apportionment calculations to properly allocate Fund taxable income among the states for state tax filing purposes
 - o Provision of tax compliance services in India for Funds with direct investments in India
 - o Assistance with management's identification of passive foreign investment companies (PFICs) for tax purposes
 - Permissible non-recurring tax services upon request:
 - o Assistance with determining ownership changes which impact a Fund's utilization of loss carryforwards
-

- o Assistance with calendar year shareholder reporting designations on Form 1099
- o Assistance with corporate actions and tax treatment of complex securities and structured products
- o Assistance with IRS ruling requests and calculation of deficiency dividends
- o Conduct training sessions for the Adviser's internal tax resources
- o Assistance with Federal, state, local and international tax planning and advice regarding the tax consequences of proposed or actual transactions
- o Tax services related to amendments to Federal, state and local returns and sales and use tax compliance
- o RIC qualification reviews
- o Tax distribution analysis and planning
- o Tax authority examination services
- o Tax appeals support services
- o Tax accounting methods studies
- o Fund merger, reorganization and liquidation support services
- o Tax compliance, planning and advice services and related projects

(b) The Committee has pre-approved Identified Services for which the estimated fees are less than \$25,000.

For Identified Services with estimated fees of \$25,000 or more, but less than \$50,000, the Chair or any member of (c) the Committee designated by the Chair is hereby authorized to pre-approve such services on behalf of the Committee.

(d) For Identified Services with estimated fees of \$50,000 or more, such services require pre-approval by the Committee.

All requests for Identified Services to be provided by the independent auditor that were pre-approved by the Committee shall be submitted to the Chief Accounting Officer ("CAO") of the Trust by the independent auditor using (e) the pre-approval request form attached as Appendix C to the Audit Committee Charter. The Trust's CAO will determine whether such services are included within the list of services that have received the general pre-approval of the Committee.

The independent auditors or the CAO of the Trust (or an officer of the Trust who reports to the CAO) shall report to the Committee at each of its regular quarterly meetings all audit, audit-related and permissible non-audit services (f) initiated since the last such report (unless the services were contained in the initial audit plan, as previously presented to, and approved by, the Committee). The report shall include a general description of the services and projected fees, and the means by which such services were approved by the Committee (including the particular category of Identified Services under which pre-approval was obtained).

V.B.3. Pre-approve any engagement of the independent auditors, including the fees and other compensation to be paid to the independent auditors, to provide any non-audit services to the Adviser (or any "control affiliate" of the Adviser providing ongoing services to the Trust), if the engagement relates directly to the operations and financial reporting of the Trust (unless an exception is available under Rule 2-01 of Regulation S-X).

The Chair or any member of the Committee designated by the Chair may grant the pre-approval for non-audit services to the Adviser (or any “control affiliate” of the Adviser providing ongoing services to the Trust) relating directly to the operations and financial reporting of the Trust for which the estimated fees are less than \$25,000. All such delegated pre-approvals shall be presented to the Committee no later than the next Committee meeting.

For non-audit services to the Adviser (or any “control affiliate” of the Adviser providing ongoing services to the Trust) relating directly to the operations and financial reporting of the Trust for which the estimated fees are \$25,000 or more, such services require pre-approval by the Committee.

(2) None of the services described in each of Items 4 (b) through (d) were approved by the Audit Committee pursuant to paragraph (c)(7)(i)(C) of Rule 2-01 of Regulation S-X.

(f) Not applicable.

(g) The aggregate non-audit fees billed by the registrant's accountant for services rendered to the registrant, the registrant's investment adviser (not including a sub-adviser whose role is primarily portfolio management and is sub-contracted with or overseen by another investment adviser) and or any entity controlling, controlled by, or under common control with the adviser that provides ongoing services to the registrant that directly related to the operations and financial reporting of the registrant was \$75,768 and \$46,542 for the fiscal years ending December 31, 2016, and December 31, 2015, respectively.

(h) Not applicable.

Item 5. Audit Committee of Listed Registrants.

(a) The Audit Committee was established as a separately designated standing audit committee in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934, as amended. The Audit Committee is composed of: Randall C. Barnes, Roman Friedrich III, Robert B. Karn III, Donald A. Chubb, Jerry B. Farley, Maynard F. Oliverius, Ronald A. Nyberg and Ronald E. Toupin, Jr.

(b) Not applicable.

Item 6. Schedule of Investments.

The Schedule of Investments is included as part of Item 1.

Item 7. Disclosure of Proxy Voting Policies and Procedures for Closed-End Management Investment Companies.

The registrant has delegated the voting of proxies relating to its voting securities to its investment sub-adviser, Guggenheim Partners Investment Management, LLC (the "Sub-Adviser" or "Guggenheim"). The Sub-Adviser's proxy voting policies and procedures are included as Exhibit (c) hereto.

Item 8. Portfolio Managers of Closed-End Management Investment Companies.

(a)(1) Guggenheim serves as sub-adviser for the registrant and is responsible for the day-to-day management of the registrant’s portfolio. Guggenheim uses a team approach to manage client portfolios. Day to day management of a client portfolio is conducted under the auspices of Guggenheim’s Portfolio Construction Group (“PCG”). PCG’s members include the Chief Investment Officer (“CIO”) and other key investment personnel. The PCG, in consultation with the CIO, provides direction for overall investment strategy. The PCG performs several duties as it relates to client portfolios including: determining both tactical and strategic asset allocations; and monitoring portfolio adherence to asset allocation targets; providing sector specialists with direction for overall investment strategy, which may include portfolio design and the rebalancing of portfolios; performing risk management oversight; assisting sector managers and research staff in determining the relative valuation of market sectors; and providing a forum for the regular discussion of the economy and the financial markets to enhance the robustness of Guggenheim’s strategic and tactical policy directives.

The following individuals at Guggenheim share primary responsibility for the management of the registrant’s portfolio and is provided as of December 31, 2016:

| Name | Since | Professional Experience During the Last Five Years |
|--|-------|--|
| Scott Miner - Global CIO | 2010 | Guggenheim Partners Investment Management, LLC.: Global Chief Investment Officer – 12/05–Present; Guggenheim Partners, LLC: Managing Partner – Insurance Advisory – 5/98–Present. |
| Anne Walsh, CFA, FLMI – Senior Managing Director | 2010 | Guggenheim Partners Investment Management, LLC.: Senior Managing Director and Assistant Chief Investment Officer – 4/07–Present. |
| Farhan Sharaff | 2010 | Guggenheim Partners Investment Management, LLC.: Senior Managing Director and Assistant Chief Investment Officer - Equities – 7/10–Present. Former, MJX Capital Advisors: Chief Investment Officer – 2005-2009. |
| Daniel Cheeseman | 2014 | Guggenheim Partners Investment Management, LLC: Director, Portfolio Manager – 09/14–Present; Guggenheim Partners Investment Management, LLC: Director, Senior Research Analyst – 11/11-09/14; Morgan Stanley: Vice President – 03/10-11/11; Merrill Lynch: Vice President – 01/07-03/10. |
| Jayson Flowers | 2010 | Guggenheim Partners Investment Management, LLC.: Senior Managing Director, 12/05 – Present; Guggenheim Partners, LLC: Managing Director -2001–2005 |
| Qi Yan | 2016 | Guggenheim Partners Investment Management, LLC: Managing Director, 2014 – Present; Guggenheim Partners Investment Management, LLC: Director, 2011 to 2014 |

(a)(2)(i-iii) Other Accounts Managed by the Portfolio Managers

The following tables summarize information regarding each of the other accounts managed by the Guggenheim portfolio managers as of December 31, 2016:

Scott Minerd:

| Type of Account | Number of Accounts | Total Assets in the Accounts | Number of Accounts In Which the Advisory Fee is Based on Performance | Total Assets in the Accounts In Which the Advisory Fee is Based on Performance |
|----------------------------------|--------------------|------------------------------|--|--|
| Registered investment companies | 20 | \$15,037,424,251 | 0 | \$0 |
| Other pooled investment vehicles | 89 | \$25,548,709,726 | 38 | \$11,939,017,281 |
| Other accounts | 132 | \$117,520,821,353 | 7 | \$1,408,503,977 |

Anne Walsh:

| Type of Account | Number of Accounts | Total Assets in the Accounts | Number of Accounts In Which the Advisory Fee is Based on Performance | Total Assets in the Accounts In Which the Advisory Fee is Based on Performance |
|----------------------------------|--------------------|------------------------------|--|--|
| Registered investment companies | 22 | \$17,140,869,062 | 0 | \$-0- |
| Other pooled investment vehicles | 3 | \$3,327,905,748 | 2 | \$3,219,159,427 |
| Other accounts | 26 | \$86,822,305,466 | 1 | \$316,602,851 |

Farhan Sharaff:

| Type of Account | Number of Accounts | Total Assets in the Accounts | Number of Accounts In Which the Advisory Fee is Based on Performance | Total Assets in the Accounts In Which the Advisory Fee is Based on Performance |
|----------------------------------|--------------------|------------------------------|--|--|
| Registered investment companies | 23 | \$2,770,517,094 | 0 | \$0 |
| Other pooled investment vehicles | 4 | \$396,220,524 | 1 | \$316,035,331 |
| Other accounts | 0 | \$0 | 0 | \$-0- |

Jayson Flowers:

| Type of Account | Number of Accounts | Total Assets in the Accounts | Number of Accounts In Which the Advisory Fee is Based on Performance | Total Assets in the Accounts In Which the Advisory Fee is Based on Performance |
|----------------------------------|--------------------|------------------------------|--|--|
| Registered investment companies | 18 | \$1,229,008,679 | 0 | \$0 |
| Other pooled investment vehicles | 0 | \$0 | 0 | \$0 |
| Other accounts | 0 | \$0 | 0 | \$-0- |

Daniel Cheeseman:

| Type of Account | Number of Accounts | Total Assets in the Accounts | Number of Accounts In Which the Advisory Fee is Based on Performance | Total Assets in the Accounts In Which the Advisory Fee is Based on Performance |
|----------------------------------|--------------------|------------------------------|--|--|
| Registered investment companies | 5 | \$576,179,976 | 0 | \$0 |
| Other pooled investment vehicles | 0 | \$-0- | 0 | \$-0- |
| Other accounts | 0 | \$0 | 0 | \$-0- |

Qi Yan:

| Type of Account | Number of Accounts | Total Assets in the Accounts | Number of Accounts In Which the Advisory Fee is Based on Performance | Total Assets in the Accounts In Which the Advisory Fee is Based on Performance |
|----------------------------------|--------------------|------------------------------|--|--|
| Registered investment companies | 7 | \$374,623,300 | 0 | \$0 |
| Other pooled investment vehicles | 0 | \$-0- | 0 | \$-0- |
| Other accounts | 0 | \$0 | 0 | \$-0- |

(a)(2)(iv) Potential Conflicts of Interest

Actual or apparent conflicts of interest may arise when a portfolio manager has day-to-day management responsibilities with respect to more than one fund or other account. More specifically, portfolio managers who manage multiple funds and/or other accounts may be presented with one or more of the following potential conflicts.

The management of multiple funds and/or other accounts may result in a portfolio manager devoting unequal time and attention to the management of each fund and/or other account. Guggenheim seeks to manage such competing interests for the time and attention of a portfolio manager by having the portfolio manager focus on a particular investment discipline. Specifically, the ultimate decision maker for security selection for each client portfolio is the Sector Specialist Portfolio Manager. They are responsible for analyzing and selecting specific securities that they believe best reflect the risk and return level as provided in each client's investment guidelines.

Guggenheim may have clients with similar investment strategies. As a result, if an investment opportunity would be appropriate for more than one client, Guggenheim may be required to choose among those clients in allocating such opportunity, or to allocate less of such opportunity to a client than it would ideally allocate if it did not have to allocate to multiple clients. In addition,

Guggenheim may determine that an investment opportunity is appropriate for a particular account, but not for another.

Allocation decisions are made in accordance with the investment objectives, guidelines, and restrictions governing the respective clients and in a manner that will not unfairly favor one client over another. Guggenheim's allocation policy provides that investment decisions must never be based upon account performance or fee structure. Accordingly, Guggenheim's allocation procedures are designed to ensure that investment opportunities are allocated equitably among different client accounts over time. The procedures also seek to ensure reasonable efficiency in client transactions and to provide portfolio managers with flexibility to use allocation methodologies appropriate to Guggenheim's investment disciplines and the specific goals and objectives of each client account.

In order to minimize execution costs and obtain best execution for clients, trades in the same security transacted on behalf of more than one client may be aggregated. In the event trades are aggregated, Guggenheim's policy and procedures provide as follows: (i) treat all participating client accounts fairly; (ii) continue to seek best execution; (iii) ensure that clients who participate in an aggregated order will participate at the average share price with all transaction costs shared on a pro-rata basis based on each client's participation in the transaction; (iv) disclose its aggregation policy to clients.

Guggenheim, as a fiduciary to its clients, considers numerous factors in arranging for the purchase and sale of clients' portfolio securities in order to achieve best execution for its clients. When selecting a broker, individuals making trades on behalf of Guggenheim clients consider the full range and quality of a broker's services, including execution capability, commission rate, price, financial stability and reliability. Guggenheim is not obliged to merely get the lowest price or commission but also must determine whether the transaction represents the best qualitative execution for the account.

In the event that multiple broker/dealers make a market in a particular security, Guggenheim's Portfolio Managers are responsible for selecting the broker-dealer to use with respect to executing the transaction. The broker-dealer will be selected on the basis of how the transaction can be executed to achieve the most favorable execution for the client under the circumstances. In many instances, there may only be one counter-party active in a particular security at a given time. In such situations the Employee executing the trade will use his/her best effort to obtain the best execution from the counter-party.

Guggenheim and the registrant have adopted certain compliance procedures which are designed to address these types of conflicts. However, there is no guarantee that such procedures will detect each and every situation in which a conflict arises.

(a)(3) Portfolio Manager Compensation

Guggenheim compensates portfolio management staff for their management of the registrant's portfolio. Compensation is evaluated based on their contribution to investment performance relative to pertinent benchmarks and qualitatively based on factors such as teamwork and client service efforts. Guggenheim's staff incentives may include: a competitive base salary, bonus determined by individual and firm wide performance, equity participation, and participation opportunities in various Guggenheim investments. All Guggenheim employees are also eligible to participate in a 401(k) plan to which Guggenheim may make a discretionary match after the completion of each plan year.

(a)(4) Portfolio Securities Ownership

The following table discloses the dollar range of equity securities of the registrant beneficially owned by each Guggenheim portfolio manager as of December 31, 2016:

| Name of Portfolio Manager | Dollar Amount of Equity Securities in Registrant |
|---------------------------|--|
| Scott Miner | \$-0- |
| Anne Walsh | \$50,001 to \$100,000 |
| Farhan Sharaff | \$-0- |
| Jayson Flowers | \$-0- |
| Daniel Cheeseman | \$-0- |
| Qi Yan | \$-0- |

Item 9. Purchases of Equity Securities by Closed-End Management Investment Company and Affiliated Purchasers.
None.

Item 10. Submission of Matters to a Vote of Security Holders.

The registrant has not made any material changes to the procedures by which shareholders may recommend nominees to the registrant's Board of Trustees.

Item 11. Controls and Procedures.

(a) The registrant's principal executive officer and principal financial officer have evaluated the registrant's disclosure controls and procedures (as defined in Rule 30a3(c) under the Investment Company Act) as of a date within 90 days of this filing and have concluded based on such evaluation as required by Rule 30a-3(b) under the Investment Company Act, that the registrant's disclosure controls and procedures were effective, as of that date, in ensuring that information required to be disclosed by the registrant in this Form N-CSR was recorded, processed, summarized, and reported within the time periods specified in the Securities and Exchange Commission's rules and forms.

(b) There were no changes in the registrant's internal control over financial reporting (as defined in Rule 30a-3(d) under the Investment Company Act) that occurred during the registrant's second fiscal quarter of the period covered by this report that have materially affected, or are reasonably likely to materially affect, the registrant's internal control over financial reporting.

Item 12. Exhibits.

(a)(1) Code of Ethics for Chief Executive and Senior Financial Officers.

(a)(2) Certifications of principal executive officer and principal financial officer pursuant to Rule 30a-2(a) of the Investment Company Act.

(a)(3) Not Applicable.

(b) Certifications of principal executive officer and principal financial officer pursuant to Rule 30a-2(b) under the Investment Company Act and Section 906 of the Sarbanes-Oxley Act of 2002.

(c) Guggenheim Partners Investment Management, LLC Proxy Voting Policies and Procedures.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Guggenheim Enhanced Equity Income Fund

By: /s/ Donald C. Cacciapaglia

Name: Donald C. Cacciapaglia

Title: President and Chief Executive Officer

Date: March 7, 2017

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By: /s/ Donald C. Cacciapaglia

Name: Donald C. Cacciapaglia

Title: President and Chief Executive Officer

Date: March 7, 2017

By: /s/ John L. Sullivan

Name: John L. Sullivan

Title: Chief Financial Officer, Chief Accounting Officer and Treasurer

Date: March 7, 2017